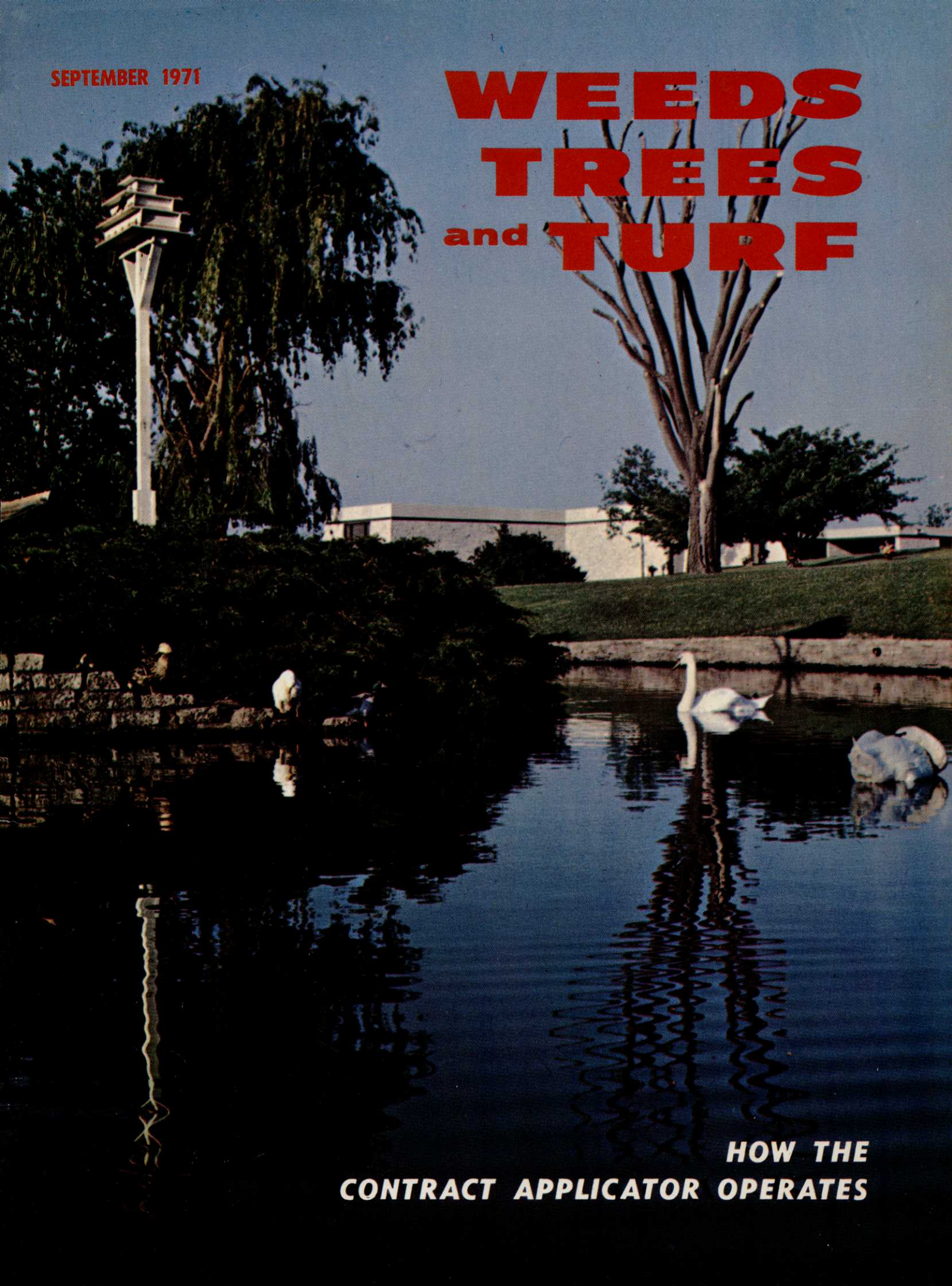
SEPTEMBER 1971

WEEDS TREES and TURF



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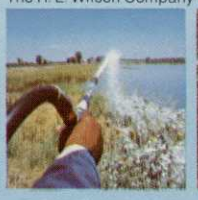

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WEEDS TREES and TURF

Volume 10, No. 9 September, 1971

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The Cover

Resthaven Cemetery, among the most beautiful in the mid-west, includes a new mausoleum. It has four wings lined with Alabama marble. A part of contract applicator Carl Ripper's operation, the grounds include pool and swans in foreground. Trimmed trees are Chinese elms, trimmed by a tree surgeon because of disease. They normally leaf out after a 6-month period, Ripper says. Photo is by Donald McGuiness, who also did Ripper's story which begins on page 12.

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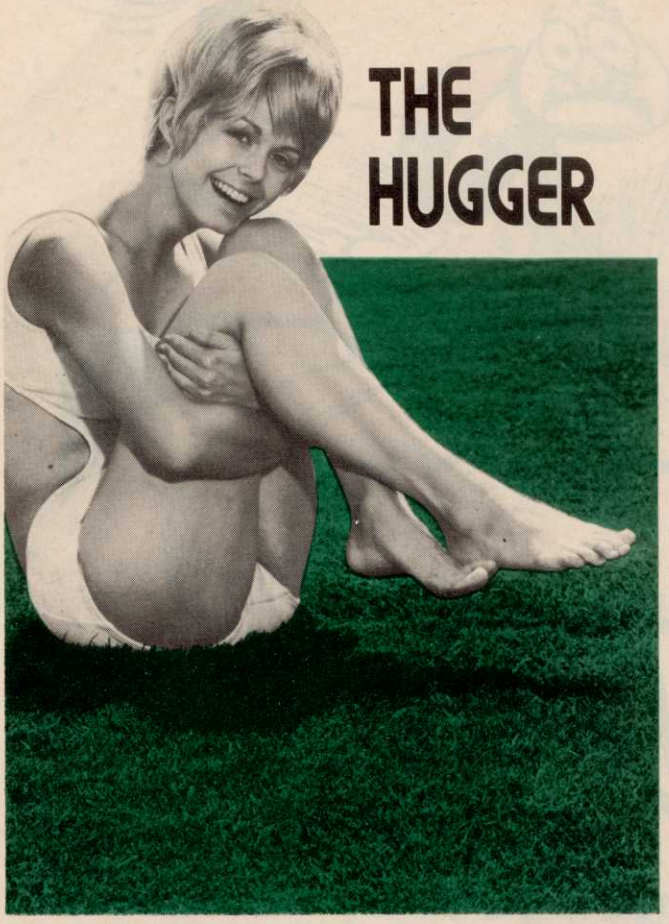

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Editorial

Highway Environment of Age

Our hats are off to the highway planners who have decided that beautification of rights-of-way, clover leafs—and especially roadside parks—deserve a share of the importance given freeways and pikes in recent years.

Coming off a couple of trips by auto, we are impressed. There is striking progress in preserving the natural resources and the original landscape values. The straight-line highway effect is passe in newer construction. Sections of interstates which offer beauty and relaxation to the driver are common. Time was, a few years ago, that it was easy to see why a new roadway was cited nationally for its beauty and practicality. Today, we would not relish the opportunity to pick a winner.

The new approach to rest area design is most welcome. We'd like to see more money spent to assure modern and adequate facilities—such as is being done by a number of states at their welcome stations.

Probably the greatest improvement in highway rest areas is the addition of land necessary not only to accommodate more users, but to offer them more relaxation in terms of esthetic beauty and avoidance of traffic noise. An excellent example is Ohio's scenic view of the Little Miami river on I-71 south of Columbus. Drivers literally leave the highway to rest and enjoy scenery at its best—away from the noise pollution of traffic. Such safety rest areas have become an important element in planning. The public today expects such emphasis for its highway tax dollar. If the truth could be ascertained, motorists are now probably willing to pay the bill.

Buffer strips, large plant specimens, the salvaging of native vegetation when practical and possible, use of mulches, specialty shrubs and ground cover, all closely compatible with existing terrain and area are keeping environmental damage to a minimum.

Big problems still abound, however. Billboards (with the possible exception of those offering motorist services) are a tragic injustice to a public which has paid the highway construction bill. Another problem we've personally struggled with on older turnpikes is that service facilities are no longer adequate to handle traffic. Pike administrations need some prodding to alleviate these situations. In writing and renewing their contracts, particularly with food and fuel service outlets, they need to demand adequate service and facilities.

Here's a more attractive way to keep bare ground bare.

Use Princep® herbicide in the fall or early spring to kill weeds before they come up. That way you don't have a lot of ugly dead weeds hanging around as you do with contact weed killers.

Not that Princep eliminates the use of contacts entirely. You may need them to get the few weeds Princep misses. But starting with Princep as the foundation for your herbicide program, you can solve the bulk of your weed problems. More economically and safely than anything else.

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Government News / Business

2,4,5-T Hearings Set For Fall Public hearings on cancellation of 2,4,5-T will be held this fall according to an Environmental Protection Agency release. EPA is seeking more facts while the cancellation order on the chemical continues.

Non-Crop Pesticide Bans Banning of pesticides is not solely an agricultural problem. Maryland state statistics on Restricted Use Permits show that almost 80% of those issued in the first half of 1971 affected residential-industrial use. Less than 20% were in regard to agriculture.

Egyptians Research Biological Controls Foreign currency grants are being awarded scientists at Dokki, Egypt, to study pollinators and control of weeds and flies. Lab tests on insects which attack Russian thistle, purple star thistle, and milk thistle are proposed. Insects that show promise for controlling these weeds will be identified, reared, and sent to the USDA Agricultural Research Service for US tests.

Soil/Water Pesticide Study Grant Prairie View A&M College, Texas, has been awarded a $25,000 grant to study movement of pesticides in soil and water as related to rainfall, runoff, and infiltration. USDA's ARS is supporting a 2-year study.

New ARS Administrator Named Talcott W. Edminster has been named administrator of the USDA Agricultural Research Service, advancing from the role of associate administrator. He succeeds Dr. George W. Irving, Jr., who retired August 1.

African Honey Bees A Threat Beekeepers are being asked by the USDA to avoid illegal importation of African queen honey bees. The variety is known for vicious swarming and stinging habits and could make beekeeping a dangerous occupation. To control this bee, the Department believes major changes in management would have to occur.

Pesticide Reports To Be Speeded William D. Ruckelshaus, EPA administrator, has announced that the agency will begin immediately to release--as soon as received--scientific advisory committee reports filed under the Federal Insecticide, Fungicide, and Rodenticide Act.

Asplundh is speeding up delivery dates on Aerial Lift Trucks

Asplundh has scheduled regular production on the Forestry or General Service bodies, both complete on GMC chassis. These 45′ lifts with a capacity of 350 pounds in all positions are fully insulated and have high pressure hydraulic systems to the baskets. Ready for fast delivery.

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The Contract Applicator

IN COMMERCIAL TURF Carl Ripper turned to contract pesticide application to expand volume beyond his 56-acre cemetery operation. He had experienced men and equipment, and he was a turfgrass specialist. His commercial lawn service business now includes 4500 customers which keep his seven 2-man crews (all of whom are state-licensed custom applicators). He services private homes, apartment complexes, factories, hospitals, and motels, plus a mobile home park.

SEE PAGE 12

IN INDUSTRIAL WEED CONTROL Alvin Price runs an industrial weed control business. His accounts—mostly with the oil industry—stretch over a 7-state area of the mid-and southwest. Also serviced by Price are public utilities, parks, airfields, industrial yards, roadsides, and parking lots. He has sold the contract applicator concept by showing customers that he can safely do the job at about one-third what they have been spending with their in-company operations.

SEE PAGE 13

IN TREE CARE F. Lewis Dinsmore typifies the tree care company which has developed a large custom pesticide application business. Dinsmore says that his company plans general tree work around the more profitable phase of the business, which he says for his group, is spraying. When conditions are unfit for spraying, Dinsmore says, crews can pick up waiting tree work. He has been in the business some 40 years, the past 35 as manager of his own company.

SEE PAGE 14

THE CONTRACT APPLICATOR

IN COMMERICAL TURF

RIPPER: "Men stay busy on one project or another, all year; that way I can keep experienced men."

CARL RIPPER owns Resthaven Cemetery at Des Moines, Ia. A short time back he saw little chance for expansion beyond the 56 acres he had set aside for Resthaven. He needed other outlets to utilize his own and his employees' experience in commercial turfgrass management.

For years, visitors to the cemetery, and even neighbors in the vicinity, had queried Ripper as to how he kept the grounds so beautiful. Why didn't he have the same problems they did with dandelions, crab grass, and the myriad weeds and fungus diseases which plague lawns.

He concluded that there would be money in doing it for them on a contract basis. He started small, but with the operation growing faster than the dandelions and other weeds he controls, in 1971 Ripper served 4,500 customers. These include private lawns, apartment grounds, factory lawns, hospital grounds, and motel areas. He even maintained the plots for a mobile home park.

Ripper has developed a streamlined operation which gives prompt professional service at reasonable prices. He has seven 2-man crews. All employees are state-licensed custom applicators. Their rigs are self-sustaining. Each carries tanks, pumps and extension hoses so that truck travel across turf is at a minimum.

"The operators are on commission," says Ripper. "When they go out on assignment, it pays to pick up all the extra business they can." With their experience and equipment, they can do an average lawn — front and back — in about 15 minutes.

All rigs are in two-way radio contact with the office. Marian Boxwell — Miss Turfer — handles all calls from customers, and keeps in constant radio contact with the men on the rigs. If an order comes in from a neighborhood where a crew is working, she radios them and the job is handled immediately. "In the spring and fall, I get as many as 75 calls a day," she says.

In the beginning, the business grew by word of mouth, but now Ripper promotes it with direct mail. Ahead of the spring and fall spraying seasons, he sends out 6000 postcards to old customers and prospective new ones. Each is hand-addressed.

Dandelions, broadleaf weeds and crab grass are the biggest motivators for business. Ripper also offers a fertilization program. "Recently, we have been getting more and more calls about sod worm," he says. "It seems to be invading the midwest."

Ripper gives much credit for his results in the cemetery, and with his new customers, to Dacthal W-75, a wettable powder herbicide produced by Diamond Shamrock Chemical Company. He counts on it to control most annual grasses and certain broadleaf weeds.

His lawn applications are carefully calibrated. He applies Dacthal W-75 at a rate of 16 pounds per acre, mixed in 60 to 70 gallons of water. He also uses Diamond Shamrock's dacamine, a water-emulsifiable and oil-soluble 2,4-D formulation.

Much of Ripper's present spraying is done in the spring. "People are lawn-conscious then," he says. But he is getting more and more fall orders. "I think fall spraying does a better job on dandelions and other broadleaf weeds," he points out. "You have a longer spraying season, up to 10 weeks. There is less wind in the fall, too. And I think the turf is less tender than in the spring. The perennial and biennial weeds are more susceptible. If there is moisture in the ground, or if you get one good rain, you are in business."

Ripper's diversification philosophy extends into still other fields. On the acres set aside for the cemetery but still unused, he has a thriving Christmas tree farm. He is also part-owner of a large tract in Des Moines which is gradually being developed as an industrial park.

Meanwhile, Ripper runs the land as a sod farm. He uses it in the cemetery, supplies it to his lawn customers, and sells it commercially.

He sees an extra benefit in his variety of projects. "I have gone a long way toward solving my labor problem," he points out. "There are no unreliable part-time people around here. My men can stay busy, on one project or another, all year. That way, I can keep experienced men on my permanent payroll. They don't care whether they are working on lawns, the cemetery, the Christmas trees, or the sod farm. They like the work, and they know what they are doing."

Resthaven Cemetery, where his business started, is one of the most beautiful in the Midwest. There are no tombstones at grave sites. Each is marked by a bronze plaque, imbedded at ground level. Ripper has two reasons for using plaques—one esthetic, the other practical. He feels that the absence of tombstones makes it possible to landscape for greater beauty.

On the practical side, the plaques make maintenance easier, require less labor. However, they create an-

(Continued on page 34)

THE CONTRACT APPLICATOR

IN INDUSTRIAL WEED CONTROL

PRICE: "We run a business type operation . . . we train our men."

A PROFESSIONAL contract applicator whose business is industrial weed control uses some solid management policies in upgrading this end of the industry.

He is Alvin Price, president of Kem-Weed Control, Inc., headquartered at Enid, Okla.

Says Price, "Our job is to satisfy our customers that we operate with the best interest of both customer and society. We sell safe pesticide use. We train our own people to understand and safely use pesticides. We run a business type operation.

"Doing this, we have been able to develop a competent company which has steadily grown." Kem-Weed Control began as a single office in Wichita, Kansas, in 1960; today claims a trade territory covering all of Oklahoma, Kansas, Arkansas, parts of Texas, Nebraska, Colorado, and Missouri.

"Unfortunately, this is an industry that has never had a training program," Price says. "There are no technical schools for application of chemicals, so it is a pretty costly experience when hiring a man."

To help his men learn, Price compiles his own training materials. Some are adapted from personal field experience. Other information is obtained from university seminars, Agriculture Department releases, and weed control conferences.

New Kem-Weed employees receive on-the-job training from an experienced applicator. After an extended period, the trainee is given a written test to determine if he has learned enough about chemicals, application techniques, and safety procedures to work alone.

Safety meetings, every six weeks, keep all employees updated on new developments within the industry and on ecological trends.

Ecological awareness within the herbicide industry as a whole is not new, Price says. "Everybody in our business is acutely aware the chemicals used should not be toxic, and if there is any one statement that makes a competent weed control man want to take up arms it is to hear someone say, 'Well, there goes another load of weed poison.' This simply is not true. Most of the chemicals we use today are safe as the salt on the family table, and much safer than aspirin."

Kem-Weed's basic herbicide is Bromosil Hyvar X, which can be formulated as a wettable powder, liquid, or pellets. Nonselective, Bromosil is compatible with most crop protection chemicals, yet remains inflammable and noncorrosive. Sprayed in controlled zones, it attacks weed roots, then dissipates.

"It does not kill the soil," Price says. "After two years, in almost every case, you have a return of vegetation — never know it's been sprayed."

Approximately 90 percent of Kem-Weed's business is related to the oil industry. They also service public utilities, parks, airfields, industrial yards, roads, and parking lots.

"Parking lots are one of the newest things," Price says. "We put the chemical down before the contractor lays his asphalt. The seeds underneath don't sprout and push up the asphalt."

When talking to prospective customers, Price promotes the industry by presenting a twenty-minute slide program. Entitled, "Safety Thru Chemical Weed Control," it points out the hazards of fire, snakes, poison, weeds, holes, and insects for employees and equipment. The value of public relations is an added selling factor for keeping well-kept grounds.

Before the advent of chemicals, weed control was accomplished with elbow grease, Price relates. Roustabout crews spent their summers going from one location to another, chopping weeds in a never-ending and costly job. Chemical control, today, he says, is the least expensive way to adequately control vegetation.

Supporting this, DuPont supplies figures showing mowing costs for a typical refinery average $889 an acre annually. An industrial application of herbicides costs the same plant, on a five-year-contract, a yearly average of $261 an acre.

Kem-Weed's pricing is figured by the square foot and unit. The fee for most tank batteries, wells, and cattle guards costs between fifty to seventy-five dollars the first year. Subsequent years run between thirty-five to fifty dollars.

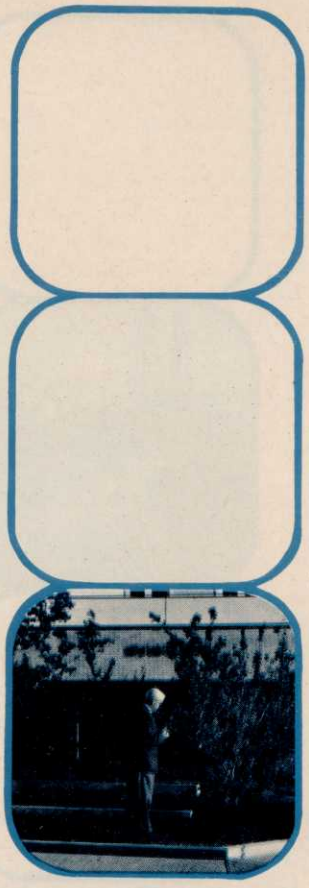
The primary problem in the weed control industry today, as Price sees it, is the instability of prices for services. "A good many people try to get into the business, thinking the entrance is thru cheaper services," he says. "But this usually brings about customer dissatisfaction because of inadequate equipment and improperly trained personnel. It results in the failure of the new company, and loss of business for established ones."

To have a profitable operation, Price considers it necessary to cover a large territory to sustain volume. Kem-Weed Control now maintains company headquarters at Enid, with an office at Wichita, and another at Meade, Kansas.

(Continued on page 37)

IN TREE CARE

DINSMORE: "We plan our tree work around spraying, and keep our experienced men employed."



MOST TREE CARE COMPANIES today depend on their contract application service to keep business on the upswing. Dinsmore Tree Service Company, St. Louis, Mo., offers a good example.

As company president, F. Lewis Dinsmore, states, "Profits in the business today depend on spraying and tree moving. This makes for careful scheduling and timely service.

"We try and plan our general tree work around the more profitable phase of the business, which for us is spraying, and keep our experienced men employed.

"When conditions are unfit for spraying — such as mildly windy days, men can be used to pick up waiting tree work."

Dinsmore has spent 40 years in the business, first as an employee, then a self-employed lone operator, and for the past 35 years as manager and owner of a going concern. With him in business today are his brother, W. T. (Red), and his son, Lew. Normally, they carry about 20 employees.

Management in this firm almost might be called a formula for operation. Regular rules are in effect for keeping down shop time hours. They have come as a result of experience and service to long-time customers. Rule No. 1 consists of zoning the St. Louis area. In short, Dinsmore has laid out his own system of zoning to fit the areas he serves. He covers the greater metropolitan St. Louis area but still finds his business concentrated more in some areas than in others. In determining size and scope of zones, the number of customers and the type of business is taken into consideration. Each foreman is assigned a zone for which he becomes responsible. This works especially well for the usual types of spraying, but tree work is also handled in this manner. By having a zone to work, foremen save travel and route time by careful scheduling. They do very little backtracking. "Jobs are not handled as they come in but by where they are located, that is," Dinsmore says, "if people will stand for it." Spray work, for example, is scheduled in advance to take advantage of the zone system. Customers are assured that their work will be done "at the proper time."

Annual service contracts are perhaps as important as any one factor in reducing unproductive hours. These, coupled with new jobs permit foremen more leeway in scheduling. Summer spraying and dormant oil spraying during late winter or early spring can be scheduled well in advance and an efficient route schedule planned.

Many longtime customers are not on annual service contracts but expect Dinsmore Tree Service to provide them regular service. Dinsmore reaches these people, and others as well, by mail. He uses direct mail service to about 3000 selected customers each month. These mail pieces are reminders to call in for service, aimed at keeping last minute scheduling to a minimum. Just because Dinsmore provides a service to a customer in his prime target area does not qualify that customer for direct mail service. This service is limited to longtime private and commercial customers rather than to the customers who only use a professional arborist for emergency and special jobs. Copy in the direct mail piece usually concerns spraying, tree moving, and general tree care. He also reminds customers that trees are available.

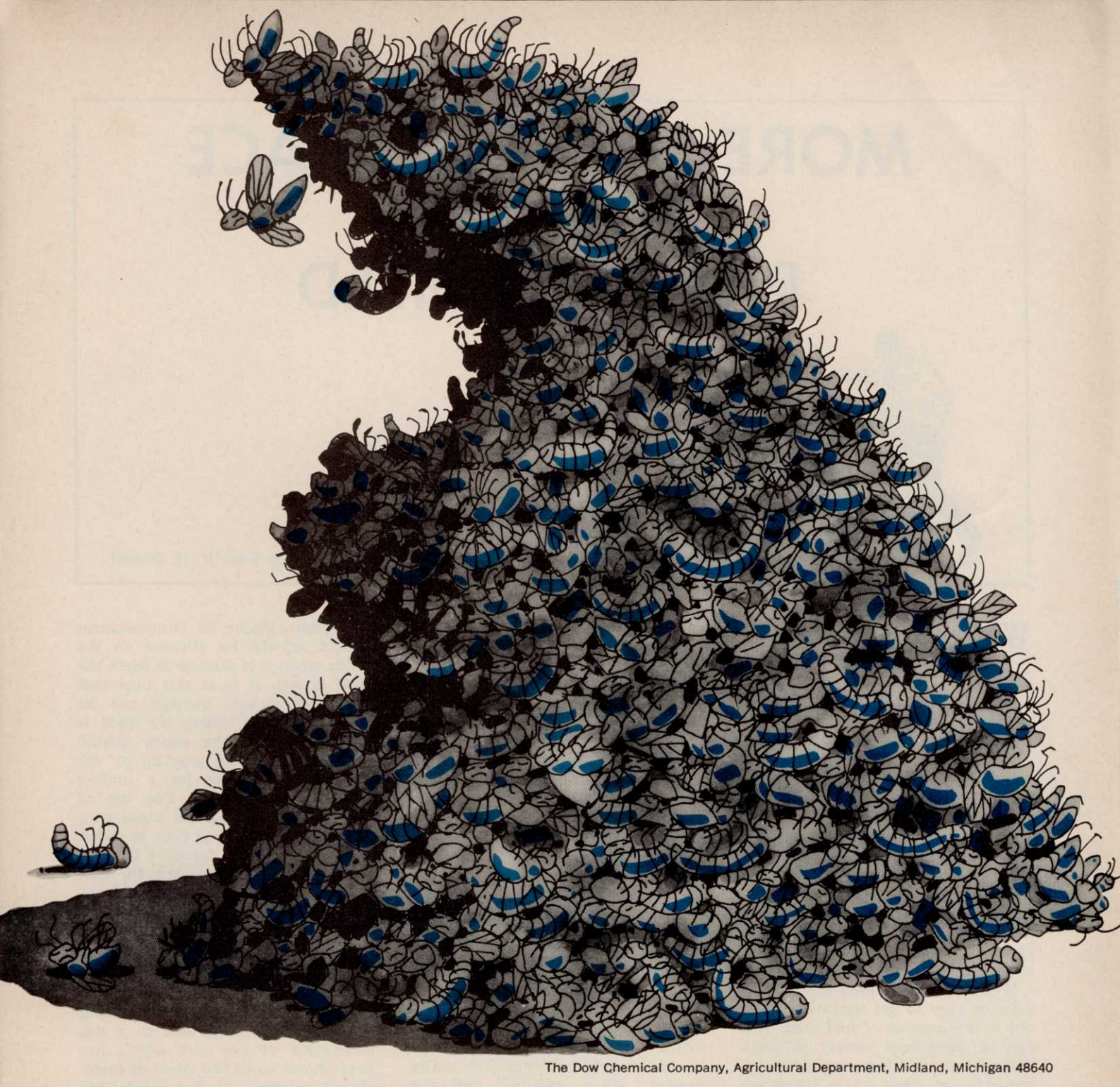
Direct mail is the only type of advertising which Dinsmore uses on a regular basis. Like other businessmen he supports community ventures such as school yearbooks and the like. But general advertising as such has never been a practice of the company. He has found that regular customers and referrals have combined to keep his crews busy through the years. Much of this must be attributed to providing good service at a fair price.

Free coffee also cuts unproductive hours. Dinsmore keeps a big coffee urn full of fresh brew for his crews; has it ready along with donuts or cookies a half hour before they leave on jobs. This, he says, eliminates the lost time crews use by stopping for coffee enroute to the job. Further, it boosts employee morale and saves the worker spending out-of-pocket change on the job. The employee thinks the free coffee and donuts are a good deal, and a favor from the company. Dinsmore believes this practice does more than save time. Along with the banter, normal in a coffee session, he finds that the men exchange job experience and gain from the morning sessions.

Another shop time saver is housing one foreman in a home at the nursery. The foreman does the tree digging with power equipment and is always on hand to help the driver load a tree. This saves sending an extra man along to pick up the tree. Also, if the wind is too high for spraying, the foreman stays on the job at the nursery. Both he and his brother maintain tree nurseries.

Dinsmore follows the practice of keeping well-trained men as the

(Continued on page 34)



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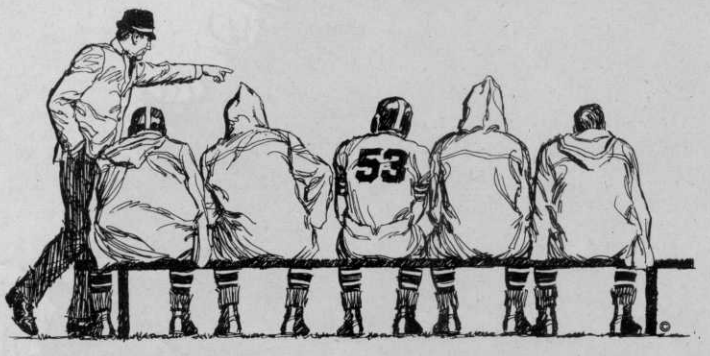
MORE USEABLE SPACE FOR THE PRACTICE FIELD



By Melvin J. Robey and W. H. Daniel

WITH todays need for more space for buildings and recreation, it's time for the athletic organizations to take a hard look at the infringement upon their football practice field areas.

More and more, school and industrial administrators are deciding to use one or more of the practice fields for additional classroom buildings or parking lots. With this happening, it often forces a coach to use the regular playing field for a practice area or if he is fortunate, he will have at least one practice field. But he usually has to share it with the band, pep clubs, gym classes and other organizations that need outdoor recreational areas.

What the coach needs is a definite plan on how to get maximum wear out of a minimum of turf area. This can be done in a variety of ways. One way is building portable or removable goal posts which allows the end zone, and areas in back of them, to be used for practice. Purdue University has done this on two practice fields. On both fields an additional 25 yards was picked up beyond the goal posts at each end. This changed the length of each practice field from 100 yards to 150 yards. The additional practice area allows the coaches to spread out more during practice and thus spread the wear and tear which means that the grass will last longer and give a more uniform playing surface.

Robey is superintendent of athletic facilities and Daniel is turf specialist, both at Purdue University, Lafayette, Ind.

Another method of increasing the practice area is to extend the yard lines as far as possible beyond the normal width (160 ft.) of a football field. This can be done easily if there is unused grass on the sides of the practice fields; this not only gives a team additional practice area but helps to keep the team out of the center of the field where wear is heaviest.

The extra practice area is of no value to the team if the head coach does not get the assistant coaches and team to use these areas. The center of any practice field should be used only when absolutely necessary, this being when the team practices kick-off returns, punt returns, full scrimmages, and passing drills. The individual drills should be done along the side lines and at the ends of the practice fields. Save the center of the field for when it is really needed. When possible, run the plays from the side line towards the center.

It is also important to keep the players moving around in designated areas so as not to wear the grass out in one spot in one day. Run four or five plays, or a single drill, then move the ball or players to another spot. The key to maintaining grass on the field throughout the season is not to practice too long in any one spot and to stay out of the center of the field as much as possible.

The use of the stadium field or practice field for band practice or any other event should be strictly controlled. Under no circumstances should anyone be allowed on the fields when it is raining or when the field is wet. It is at this time that the most serious damage can be done to a field. When the field is extremely wet, the coach should consider cancelling practice or use the side line areas for a limited practice session only. The use of tennis shoes, or football shoes with very short cleats (less than ½ inch), would also help to conserve the turf on wet days, or any time for that matter.

The best policy to follow in order to maintain good grass, and for player safety, is never allow anyone or any organization on the fields except at half-time during a game. The heavy use of the fields during the week will only lead to a deterioration of the turf which has been shown to be the cause of many player injuries. If the fields are practiced on heavily down the center and allowed to become worn out the chances of an increase in player injuries is enhanced. With the proper maintenance and player use of the field there is less chance for serious injuries to occur.

Todays coaches and turf managers need to be alert to the problems of maintaining fields which already are too small for their needs. To do so means to use every available square foot of area and to do it wisely. To maintain the grass throughout the season requires a conscientious effort on behalf of all the people involved.

Pollution control:

A corporate responsibilty

Pollution and pollution abatement have become important aspects of every business. They affect budgets, profit and loss, position in the community, corporate image, even the price of stock in some cases.

Pollution is a now problem that is receiving now attention from astute businessmen. Water treatment plants, fume scrubbers and filtration systems, land reclamation, plant beautification, litter prevention, employee education programs, are all types of things industry is doing to help in the pollution fight.

But regardless what a businessman is doing today he must be considering pollution control efforts for tomorrow.

One thing he can do is write for a free booklet entitled "71 Things You Can Do To Stop Pollution." It doesn't have all the answers on pollution. But it might give a businessman a few ideas for both today and tomorrow.

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—FOR GOLF COURSE SUPERINTENDENTS—

PROFESSIONAL CERTIFICATION

By PALMER MAPLES, JR.

MANY PROFESSIONS have a certification program to measure the performance of their "practitioners" and the general success of their activities.

Whether it is a certification program for physicians and lawyers or for other professions and service groups, the person being awarded this "seal of approval" received it from his peers—those who are in the same field and who, from their own experiences know the problems and standards of performance associated with that particular profession.

And so it is with the newly-announced certification program of the Golf Course Superintendents Association of America which was introduced in June.

A "blue-ribbon" nine-man committee, made up of golf course superintendents, has formulated the program, in which those superintendents vying for the title of "Certified Golf Course Superintendent" will be judged by their colleagues. The committee has worked with Dr. Paul M. Alexander, Director of Education of GCSAA, in planning and implementing this program.

Palmer Maples, Jr.

What does the GCSAA certification program entail?

The focus of the program is a written examination, divided into six parts, with each part dealing with the major areas of the experienced superintendent's job.

The six areas are:

1. Knowledge of the Golf Course Superintendent's Association of America, including the history, purpose and ethics of the Association, and the profession of golf course superintendency;

2. Knowledge of the game of golf, including the official rules of the game;

3. Turf - management procedures (consideration of practical problems in the major areas of irrigation, fertilization, equipment calibration, soil facts, cost analysis, drainage systems, etc.);

4. Pesticides — comprehensive questions on the selection, usage, safety precautions, and limitations of contemporary plant protectant chemicals are included. This will indicate to local, state or federal pest control licensing agencies that the superintendent who passes this examination is fully proficient and capable of handling and supervising the use of such materials;

5. Business Administration—techniques of record-keeping and application of such information, budget preparation and presentation, etc.;

6. Management: people relationships, recruiting, training, and supervising crews; public relations (officials, members, club department heads, community, etc.).

Members of the GCSAA who have held the Class A classification for three years, and who have been employed as golf course superintendents for that period of time, are eligible to take this examination. In addition, those members who have been employed as golf course superintendents for 20 years or more while enjoying Class A status will be certified without examination if they apply before September 1, 1973.

Applications and examination papers are coded to maintain confidentiality, and these are obtained through the GCSAA headquarters (in the first month following announcement of the Certification Program, GCSAA received more than 450 requests for applications!). The superintendent may take as much time as he desires to prepare for the examination. When he is ready, a date mutually agreeable to him and to an official monitor in his area is arranged. The examination material, identified only with the code number, is then sent to the monitor in a sealed packet and opened only in the presence of the applicant. When the examination is completed, the material is resealed in the presence of the applicant and mailed back to GCSAA headquarters.

A maximum of six hours, all in the same day, is allowed for the superintendent to complete all parts of the examination. Each of the six parts is graded separately, and a passing grade in every part is required for certification. If the superintendent fails any one or more parts of the examination, he will need to be reexamined only in those parts which were failed. The applicant can repeat the failed portions

---

Palmer Maples, Jr., is superintendent at The Standard Club, Atlanta, Ga. He has been a member of the Carolinas GCSA for 11 years, serving as president for three years. A member of the GCSA for 10 years, he has served on the editorial, association planning, and certification committees.

as many times as he desires, but if the failed parts are not successfully completed within one year of the original examination date, he must repeat the entire examination.

One time is not enough for certification.

The certification program must keep pace with progress in agronomy, equipment and technology — and so must the golf course superintendent. Therefore, the certified golf course superintendent will be required to take another examination within five years of being certified. He must also maintain his membership in GCSAA and remain actively employed as a golf course superintendent. Other requirements for reexamination are completion of one regional GCSAA workshop or successful completion of a GCSAA-approved correspondence course of study.

Other aspects of the certification program deal with those superintendents who leave the profession for several years and their mandatory reexamination if they return to golf course superintendency.

The GCSAA certification program climaxes 30 years of discussion and planning, and the benefits of certification will undoubtedly show that this careful planning has been well worth the time and effort involved.

Certification should also attract many young people into the profession of golf course superintendency, now that they know that there is some way of measuring their achievements in the profession.

Hopefully, certification will also lead to standardization of curricula in the schools offering turf management programs.

With certification, the role of the superintendent will not only receive greater emphasis through all who are associated with him on the golf course, but it will enhance his stature in the community as well. Because of today's great stress on ecology, the expertise that the golf course superintendent has attained in turf management and plant protectant chemicals should make him a recognized authority on these environmental factors within the community.

To summarize then, the GCSAA Certification program is not only beneficial to the superintendent. This program has inherent and potential benefits to club owners, club officials and members, golfers, other agencies concerned with golfing, and the public at large through the certified superintendent's involvement with the community.

Bonsai Teaching Film For Purchase Or Lease

A new how-to-do-it film on growing Bonsai has been developed by The Brooklyn Botanic Garden, Brooklyn, N.Y.

The 22-minute showing is in full color and 16mm in size. It presents the essential techniques of creating an instant Bonsai from nursery or other stock and includes repotting, trimming, pinching, etc.

It was presented at the recent International Shade Tree Conference at Montreal by Robert Tomson, assistant director at the Brooklyn Botanical Garden. He reported to the group that the film has been made available at a rental cost of $15 for one showing, plus return postage and insurance. Purchase price of a print is $250, Tomson said.

In either case, the film is available directly from the Botanic Garden at 1000 Washington Ave. Zip code is 11225, and inquiries should be directed to Mrs. Norman Free, Tomson reported.

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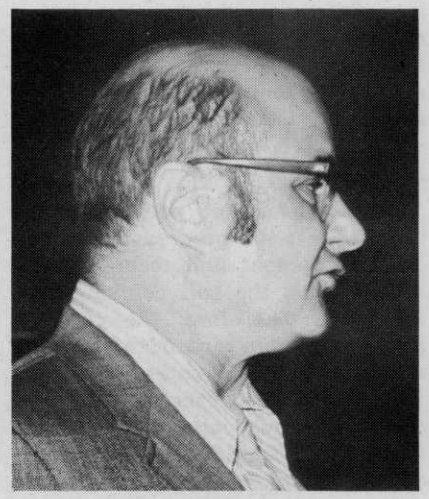
Formal procession opened the 47th International Shade Tree Conference.



Outgoing V-P John Weidhaas

International Shade Tree Conference Report
The 47th at Montreal

The 47th International Shade Tree Conference opened at Montreal with the pomp and pageantry which Canadians do well and which statesiders have come to expect. Bagpipers formally piped ISTC President J. A. Kimmel and his entourage to the rostrum where colors were presented by a military squad. Both "O Canada" and "The Star Spangled Banner" preceded Kimmel's formal opening.

Commercial exhibits were down compared to prior years, but this was expected. Fewer companies transported equipment to Canada for the international show. Educational sessions operated in full swing and paid registrations numbering 878 were a new ISTC record. A total of 128 paid registrations were recorded on the final morning of the Aug. 8-12 event.

Next year, for the '72 session, the group will go to Newport Beach, Calif. William T. Bell, Newport Beach city superintendent of street trees, will serve as chairman of the local committee. Conference dates are Aug. 6-13, 1972. Bell said headquarters for the '72 event will be the New Porter Inn at Newport Beach. He said its location is about 15 miles south of Long Beach, Calif., and some 45 miles south of downtown Los Angeles. The Inn is on the beach itself just off Pacific Coast Highway, Route 1, Bell said.

Arrangements this year were handled by Yves Desmarais, director of the Montreal Botanical Gardens and a staff of capable Canadian members of the arborist industry.

Four merit awards were made as follows: John P. Hansel, Waldick, N. J., and executive secretary of the Elm Research Institute; Clarence E. Lewis, professor of horticulture, Michigan State University, East Lansing; J. Irwin Miller, Columbus, Ind., and chairman of the board of the Cummins Engine Foundation; and Noel B. Wysong, Golconda, Ill., former editor of the Arborist News and active in both the industry and Conference activities.

Authors citations went to J. Cedric Carter, plant pathologist, Illinois Natural History Survey, Urbana, and to Theodore T. Kozlowski, plant physiologist at the University of Wisconsin, Madison.

An honorary member award was presented Roy M. Nordine, Lake City, Minn. At the time of his retirement this past year, he was

Outgoing ISTC President J. A. Kimmel, director of parks, Toronto, Ontario, Canada, passes gavel to President-elect H. M. Van Wormer, Van Wormer Tree Service, Richmond, Va.

ISTC Conference team, Mr. and Mrs. E. C. (Cal) Bundy, Urbana, Ill. Cal, executive-secretary, is assisted by his wife, Nadine, as ISTC secretary.

Claude Desjardins, Arbo Service Ltd., Laval, Quebec, served as coordinator for the annual meeting.

Propagator at the Morton Arboretum.

At the business session, F. L. Dinsmore, Dinsmore Tree Service Company, St. Louis, Mo., was elected vice-president. President-elect, succeeding Kimmel is H. M. Van Wormer, Van Wormer Tree Service, Inc., Richmond, Va.

A tragedy at the Conference was the sudden death of Stanley R. McLane of Kansas City, Mo. He had travelled to the Conference for the express purpose of receiving an honorary life membership award. He died Wednesday afternoon, prior to the Thursday banquet award ceremonies.

McLane had been head of the J. C. Nichols nursery and landscape department at Kansas City. He supervised the planning and planting of many of Kansas City's parkways and parks, street entrances, and the formal gardens for the Country Club District residential areas of the City. He was a 25-year member of the ISTC.

Also named for honorary life memberships were John G. Michalko, Gates Mills, Ohio, and Ira F. Wickes, Suffern, N. Y. Outgoing ISTC President Jack A. Kimmel, Toronto, Ontario, Canada, was accorded this honor, which is a Conference custom. Michalko served the Cleveland, Ohio, horticultural division for 38 years, the last 11 as commissioner. He has received many honors through the years but is probably best known for the extensive tree planting and beautification program he instigated for Cleveland.

Wickes joined the ISTC in 1935. During his career as a commercial arborist, he promoted the industry and established an enviable reputation for his business standards and code of business ethics. He trained many arborists who are in the field today.

Director of Canada's National Capital Commission, Ottawa, Ontario, James A. White, related the program of the Commission and how it has established a massive greenbelt area and park system in the Ottawa and Hull municipal areas.

Modern planning of the current Commission program began with Prime Minister Mackenzie King in 1937 when he asked internationally known Jacques Greber of France to produce a master plan for development of Canada's capital. World War II interfered, but work got underway by 1951.

Keys to the plan was development of a greenbelt about the city of Ottawa; the relocation of railway lines and marshalling yards; the extension of the park system and green spaces throughout the urban area; and the decentralization of government office complexes. Since, plans have been put into operation and updated as needed. White said the Commission never

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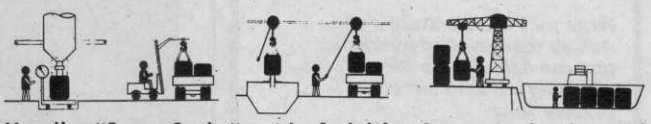

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Bob Monsma, Vermeer, Manufacturing Company, Pella, Ia., left, and Bruce Fyfe, Allan Fyfe Equipment, Toronto, Quebec, Canada, discuss program with Conference host, Yves Desmarais, center, who served as general chairman.

lost sight of the importance of trees in the overall program.

Among improvements, White pointed to the 4-acre Garden of the Provinces, just more than a block from Parliament Hill. He said the Commission also owned another 26 such parks. Another phase of the program concerns 35 miles of parkways, all dependent on well kept trees plus the greenbelt. Thirty additional miles of parkways are planned.

Relocation of railways and marshalling yards were probably the greatest factors, he stated, in release of land for parks, parkways, expressways, and open spaces in the center of the Capital region. This relocation program removed 77 level crossings and 35 miles of track within the area. It also released 251 acres of land for park and parkway development plus areas for a limited access expressway.

Decentralizing of government office buildings improved traffic flow, White said. It also provided more pleasant working conditions for civil employees.

Largest single development, White continued, is Gatineau Park, comprising 80,000 acres of hilly woodland. This land has been purchased and is now being developed for the public. The Greenbelt itself is a 41,000-acre area. It forms a ribbon of farm land and wooded sections at an average depth of 2½ miles along the sides of Ottawa not bounded by the Ottawa River. It was purchased, White said, to prevent the sprawling development of a city beyond the economic limits of sewage, water, and other administrative problems. This Greenbelt, White pointed out, is heavily populated with elms. These have undergone an intensive DED preventive program. Now that DDT can no longer be used, White said methoxychlor is being used. Applications have been made by helicopter, hydraulic sprayers, and

Coffee breaks were scheduled in exhibit hall. At far left is Frank Charter, Charter Tree Service, West Acton, Mass.

a mist blower. Every effort, White indicated, will be made to save this elm population. That the Commission has been successful is the fact that in some areas, DED tree loss has been kept to 3- to 4% of the elm population.

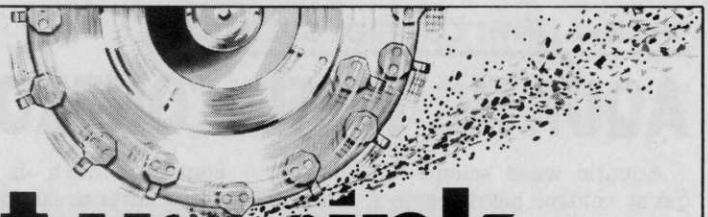
John W. Mixon, metro forester, Georgia Forestry Commission, Atlanta, discussed a new program in that state known as urban or metro forestry. Started in 1967, the program now includes five foresters assigned to work with homeowners and others in the 7-county areas of metropolitan Atlanta. Nixon said the group assists landowners with forestry and shade tree problems. He pointed out that Metro foresters diagnose problems for homeowners but do no treatment. Such is left for the homeowner or private tree company.

Mixon said the Atlanta group of state employees cooperate with the Better Business Bureau in checking complaints from homeowners who have been victimized by fly-by-night, unskilled and non-professional people who pose as arborists or tree surgeons. They also work to make the public aware of fraudulent practices. He reported that metro areas such as Atlanta include terrain heavily populated with trees. He said that metropolitan Atlanta includes 861,000 acres which could be classified as forest land. This accounts for 61% of the total land area.

A veteran of 42 years in the industry, George W. Goodall, Goodall Tree Expert Co., Portland, Me., discussed the recent popularity of arboriculture among young men seeking careers. He pointed out the growing demand for the technical arboriculturist to handle new business among home owners, industry, and the ever newly developing shopping centers. These young people, he said, value clean air and the environment which goes with it, along with the good life. But, Goodall warned, "during the next 10 years, or even less, this sense of values may be bitterly contested by our young men, as they seek to find the utopian course between preserving our matchless environment and achieving their economic ambition."

He pointed out that during his many years of tree specialization, the tree care company operator has progressed immeasurably from the earlier concept as a "patent medicine man." Today, he said, the tree care company must develop a business to successfully serve customers

(Continued on page 41)



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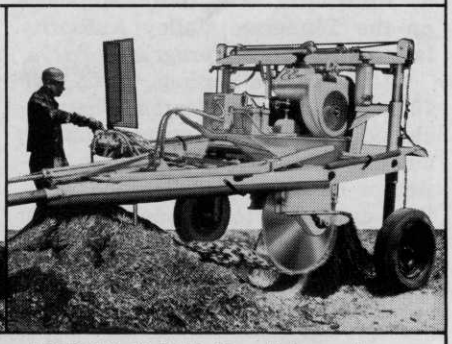

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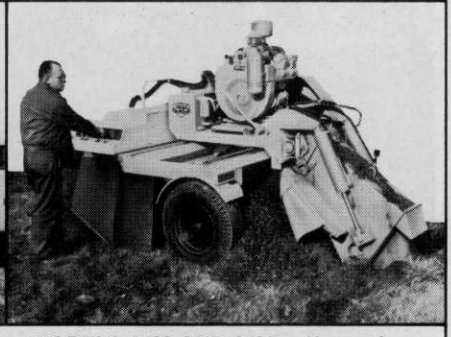

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THE HYACINTH CONTROL SOCIETY

AQUATIC WEED CONTROL REPORT

Aquatic weed science and subsequent control has become a mature industry. Long a universal problem, though often not recognized as such, it has been getting more attention in recent years.

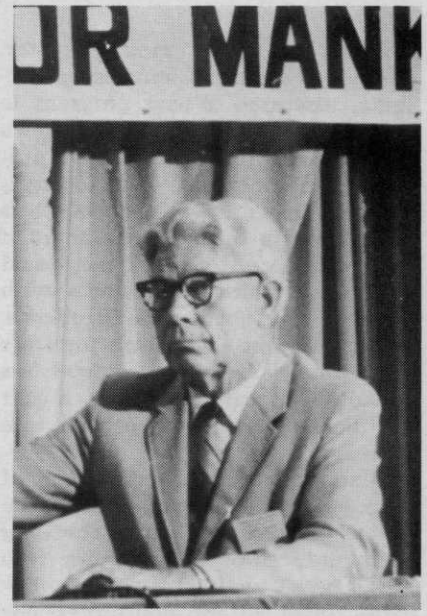
A good example is the 11th annual meeting of the Hyacinth Control Society, composed of a group of scientists and aquatic weed specialists dedicated to control of all noxious aquatic weeds.

The group, representing several foreign countries and almost half the states of the union, but mostly from southeastern section of the country, met four days last month at Tampa, Fla., with a registration of 180. Last year's session was held at Huntsville, Ala., with emphasis on the Tennessee Valley Authority lake weed control programs.

At the Tampa sessions, more than 70 papers were presented. They included much on chemical control, and the use of chemicals with limited or no toxicity to fish and wildlife, and also to people. More in evidence at the '71 session were papers on mechanical and biological controls. Much is being done in these latter areas, but practical solutions at this time are far from adequate to do the control job.

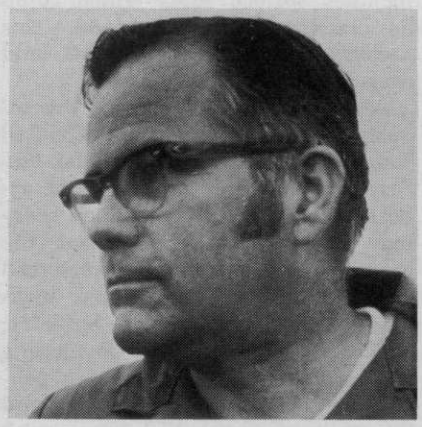
President of the Society, Stanley Abramson, in opening the yearly conference said that the theme for this '71 session — Environmental Management for Mankind — was especially appropos in light of the fact that the nation has become acutely conscious of the environment, and that action must be initiated immediately to upgrade its ecology.

The Society's concern with waterways and what to do about the aquatic weed problem, Abramson said, was first recognized in Florida. During the past 10 years, he continued, aquatic weeds have multiplied faster than means of eradication can be found. Herbicides, Abramson pointed out, still remain the most important tool available for aquatic weed control. He stressed that this tool must be handled properly by trained personnel and not used promiscuously by untrained people, or the general public. He maintained that the public needs to be kept fully informed of all objectives pertaining to weed control operations.



Outgoing president Stanley C. Abramson.

Newly elected president of the Society, Robert J. Gates, center, at field presentation.

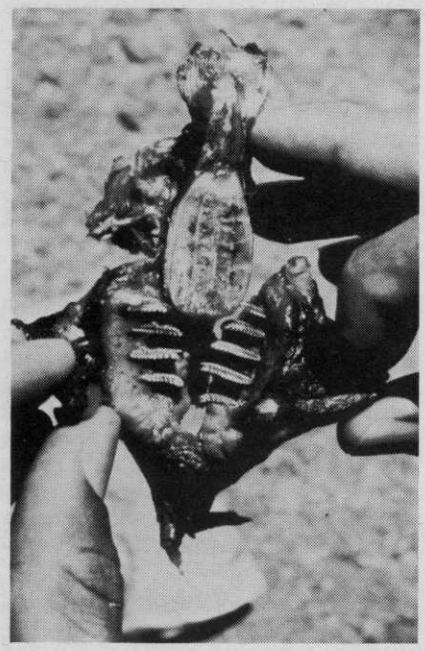


C. T. Brown, Jr., Medical Park Clinical Laboratories, Inc., Tampa, has been working with Eron foam generator.

Airboat operator Russell Lee, Southwest Florida Water Management District, at field demonstration.

Senator Randolph Hodges and Herbert J. Friedman, president, Southern Mill Creek, Tampa.

Group tests Eron foam generator using multi-colored foam at Society field demonstration.



Pharyngeal teeth and pad of the White Amur, a fish being tested for aquatic weed control.

The Society, Abramson said, will continue to be confronted with problems relating to practical aquatic pollution control. He reminded members that the paramount reason for the Society's existence was to coordinate efforts of all members in finding solutions which will be practical and acceptable.

Randolph Hodges, executive director of the Florida Department of Natural Resources, and a former senator, discussed the current Florida role in environmental research and protection. His goal, he stated, is to secure the complete coordination of all agencies and groups concerned with aquatic weed problems. Contracts for control, utilizing $2.8 million which the state legislature has authorized, will be given both to public and private interests. Hopes are that local funds can be raised in many cases to match the state funds, he said.

Senator Hodges in recognizing Society programs, research and activi-

Robert E. Eron, Eron, Inc., with ATV unit readying for test of foam generator.

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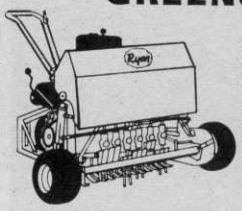

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Byron Stark, Kilgore, Tex., demonstrates gun used on FoamSpray.

FoamSpray in action. Recently acquired from R. L. Wislon Co. by LTV Aerospace Corp., unit handles spray with reduced wind drift and helps hold chemical on foliage for longer periods.

ties, pointed out that his office would be receptive to any suggestions from this as well as other groups. The entire tenor of his presentation appeared to be one offering the complete cooperation of state agencies in working with the many civic and governmental groups in finding acceptable solutions to aquatic weed pollution.

A University of Florida panel of scientists representing several divisions of the University discussed possible research projects relating to aquatic weeds. Dr. Roy Shirley, in the animal science field, offered little hope for use of aquatic weeds, particularly hyacinths, as animal rations. He said research indicated that no more than one-third, and a better guess in his opinion would be 10% to 15%, of a livestock ration could possibly consist of hyacinths (via pellets or in other processed form).

Hyacinths, Shirley continued, vary from time to time in protein content. Range seems to be from 15% protein down to 8%. At times, plants also contain more ash. Processing apparently deteriorates the protein content.

A brighter outlook was given by Dr. Thomas D. Furman, environmental engineer. He said that aquatic weed plants — hyacinths in particular — might serve to extract nitrogen and nitrates from raw sewage prior to dumping it. As a source of nitrogen and nitrate uptake (as well as phosphorus uptake) he believes up to 50% can be extracted.

In a Florida lake, where such studies are being made, he has found that hyacinths under these conditions can double in mass every 12 to 15 days. Growth ponds, he said might well be a method of reducing nutrients going into a lake. Next step, he pointed out, would be to use and sell hyacinths for conversion into paper. His belief appeared to be that the big problem of such a venture would be in harvesting.

The suggestion that hyacinths could be used as paper has merit. Dr. William Nolan, chemist, said there is a great potential of using hyacinth for paper. He showed a number of samples from his own lab. He said that such plants make a strong paper and this method can utilize 50% of the plant. Pith is made into celluose and the fiber into paper.

Robert J. Gates, Southwest Florida Water Management Director, New Port Richey, Fla., was elected president for the coming year. Other officers and directors elected at this session included: Stanley Abramson, Southern Mill Creek Products, Tampa, vice-president; Brandt G. Watson, Naples Mosquito Control, Naples, secretary-treasurer; David L. Sutton, Agricultural Research Service, USDA, Ft. Lauderdale, editor; Dr. Alva Burkhalter, Aquatic Plant Research and Control Coordinator, Florida Department of Natural Resources, Tallahassee, director; Ray A. Spirnock, Miami, director; and Robert P. Blakely, Old Plantation Water Control District, Plantation, Fla., director.

In future editions, WTT will carry a number of the technical papers presented at this Society meeting.

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meeting dates

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Virginia Tech Turfgrass Field Days, V.P.I. and S.U. Turfgrass Research Center, Blacksburg, Va., Sept. 8-9.

Michigan Turfgrass Field Day, MSU, East Lansing, Mich., Sept. 9.

Alabama-Northwest Florida annual turfgrass short course in cooperation with Auburn University, Auburn, Ala. Sept. 9-10.

Illinois Turfgrass Field Day, Univ. of Illinois Turf Plots, Urbana, Ill., September 10 (1:00 p.m.).

Ohio Turf and Landscape Day, Ohio Agricultural Research and Development Center, Wooster, Ohio, Sept. 14.

Florida Turf-Grass Management Conference, Pier 66, Ft. Lauderdale. Sept. 19-22.

Minnesota Shade Tree Maintenance Short Course, St. Paul campus, UM, St. Paul, Minn., Sept. 23.

Midwest Regional Turf Foundation field day, Purdue University, Lafayette, Ind. Sept. 27.

Eastern Kentucky Turfgrass Field Day, EK Univ., Richmond, Ky., Oct. 4.

30th Annual Short Course for Roadside Development, Columbus, Ohio. Oct. 4-8.

Society of Municipal Arborists, 7th annual meeting, Empress Motel, Asbury Park, N. J. Oct. 6-8.

Helicopter Association of America western operators management seminar at the Marriott Inn, Belmont, Calif., Oct. 19-23.

Lawn and Ornamental Seminar, Florida Horticultural Sprayman's Assn., Pier 66, Ft. Lauderdale, Fla., Oct. 29-30.

Missouri Turfgrass Conference in the Memorial Union, University of Missouri, Columbia. Nov. 3-4.

Wisconsin Golf Turf Symposium at the Pfister Hotel, Milwaukee, Nov. 4-5.

Lawn & Garden Distributors Assn., Annual Convention, Sheraton O'Hare Motor Motel, O'Hare Airport, Chicago, Ill., Nov. 4-5.

National Institute on Park and Grounds Maintenance, Park Maintenance, Sheraton-Schroeder Hotel, Milwaukee, Wis., Nov. 15-18.

Arizona Parks and Recreation Conference, annual meeting, Holiday Inn, Tempe, Ariz., Nov. 17-19.

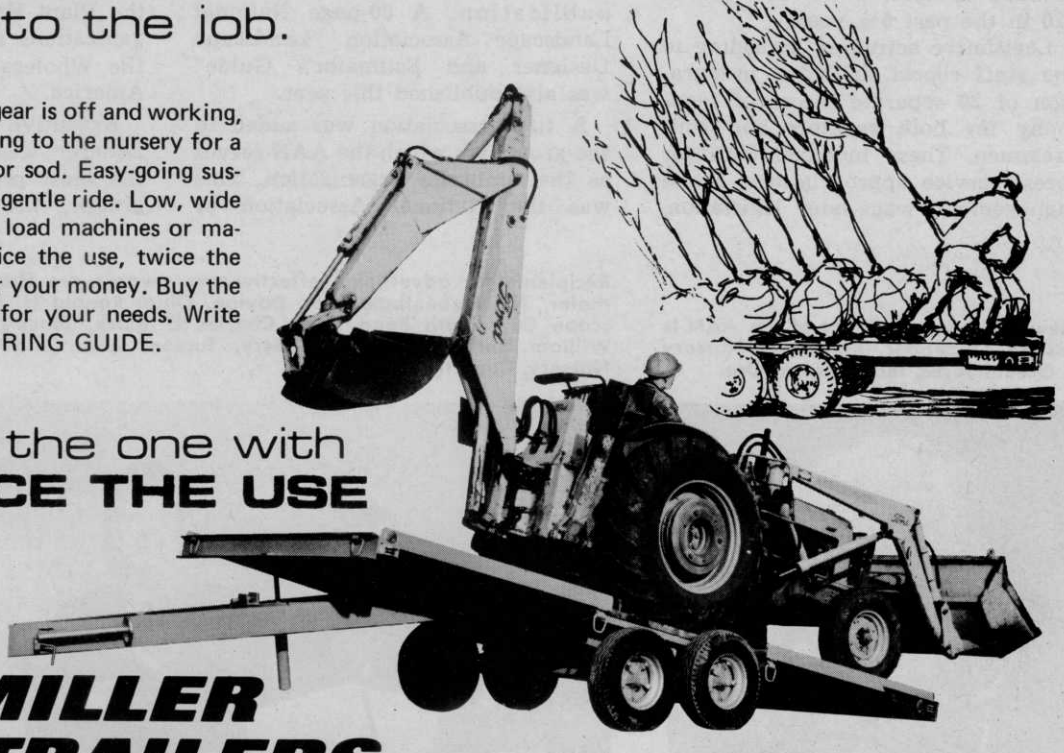
National Agricultural Aviation Association, Fifth Annual Conference, Fairmont Hotel, Dallas, Tex. Dec. 5-9.

North Central Weed Control Conference, 26th Meeting, Muelebach Hotel, Kansas City, Mo., Dec. 7-9.

Northeastern Weed Science Society, 1972 Convention, Hotel Commodore, New York, N. Y. Jan. 5-7.

Haul your equipment on a Miller Tilt-Top and you can **get to work** while others are still getting to the job.

When your rolling gear is off and working, Miller's HT tags along to the nursery for a big load of stock or sod. Easy-going suspension provides a gentle ride. Low, wide platform is easy to load machines or material. You get twice the use, twice the value. Get more for your money. Buy the right Miller trailer for your needs. Write for FREE TRAILERING GUIDE.



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American Association of Nurserymen

The "Green Survival" national marketing program of the American Association of Nurserymen was but one of some 200 activities of the group this past year. In a report at this year's 96th annual convention at Dallas, Tex., plans for a second such kit were announced.

The original kit contains advertising material and published helps which aid the individual retailer fit readily into the evironmental pace of the '70s.

Outgoing AAN president, Harold R. Nickel, looks on the year-old program as an opportunity "to help America." "Green survival," he told members, is the nursery industry's own program for improving the environment, offering better air to breathe, more beauty to see, and conservation of land from erosion with plantings of trees and shrubs. "We have a great obligation here," he said, adding that "We also have a great contribution to make."

Among activities of what has to be among the most forward programs of an association in the nation was membership recruitment. It has climbed to 1863, a net increase of 520 in the past 5½ years.

Legislative activities, according to the staff report, included preparation of 20 separate pieces of testimony for both senators and congressmen. These included data for forest service appropriations, forest management, wage-hour legislation, pesticides legislation, Washington Youth Gardens appropriations, postal rate revisions, patent legislation, and others.

Another significant activity was in the field of transportation. A nationwide transportation survey was made of AAN members to offer a better understanding of legislative needs of the group. The association staff and members helped force cancellation of a proposed surcharge on parcel post parcels over certain dimensions. This, the report stated, forestalled action by the trucking industry to make a drastic increase in classification ratings on shipments of trees and other horticultural products.

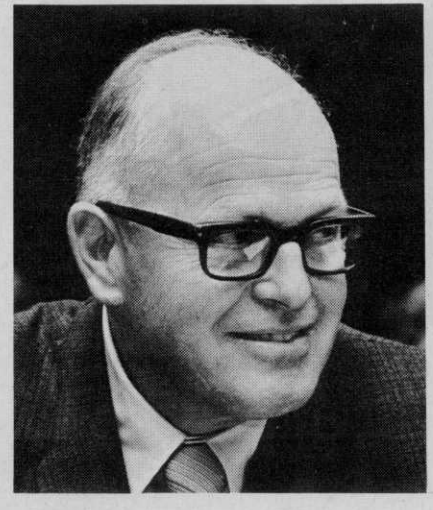
Also announced was the exciting new publication, "Technical Glossary of Horticultural and Landscape Terminology." This is a 112-page, hard cover edition containing more than 2100 horticultural and landscape terms and some 700 meanings of botanical names. Besides primary work of the Horticultural Research Institute, nine other associations cooperated in production of this publication. A 60-page National Landscape Association "Landscape Designer and Estimator's Guide" was also published this year.

A fifth association was added to the group, for which the AAN serves as the umbrella organization. This was the National Association of Plant Patent Owners (NAPPO). Its mission is to protect and enhance the Plant Patent System. Other organizations are the HRI, NLA, and the Wholesale Nursery Growers of America.

Executive Vice President Bob Lederer was appointed to perhaps the most prestigious of all Capital groups, the Society for a More

Harold R. Nickel, left, outgoing AAN president, awards Norman J. Colman award to Dr. Neil W. Stuart, retiring this year from the USDA Agricultural Research Service.

Newly elected president of the AAN is Joseph Klupenger, Klupenger Nursery & Greenhouses, Inc., Aurora, Ore.



Recipients for advertising effectiveness awards are (from left): John D. Siebenthaler, The Siebenthaler Co., Dayton, Ohio; Ronald H. Swanson, Highland Landscape Co., South Bend, Ind.; Charles E. Black, Black's Nursery, El Paso, Tex.; William Harlow, Harlow Nursery, Tucson, Ariz.; and Itsuo Uenaka, Cupertino Nursery, Cupertino, Calif.

Beautiful Capital, Inc., an organization originated by Mrs. L. B. Johnson.

Awards were as follows: Dr. Neil W. Stuart, retiring from the USDA Agricultural Research Service after 35 years, received the Norman J. Colman award for his contributions to horticultural research; Sidney B. Hutton, Sr., West Grove, Pa., first U.S. nurseryman to package agricultural food products in cellophane for marketing and a pioneer in the nursery industry received the Hall of Fame award, highest awarded by the AAN; and Mrs. Eleanor B. McClure, Kirkwood, Mo., the '71 Garden Writer's award.

Eight retail nurseries received recognition for outstanding advertising programs. Named were: Highland Landscape Company, South Bend, Ind.; John Harlow's Nursery and Flower Shop, Tucson, Ariz.; Black's Nursery, El Paso, Tex.; Siebenthaler's Landscape Nursery, Dayton, O.; and Hicks Nurseries, Westbury, L.I., N.Y. Receiving honorable mention were: Cupertino Nursery, Cupertino, Calif.; Turner Brothers Nursery, West Long Branch, N.J.; and Sunnyside Nursery, San Anselmo, Calif.

NAA Schedules Annual For Feb. 13 At Tampa

Annual meeting of the National Arborist Association will again be held at the International Inn. Tampa. Fla. Dates are Feb. 13-17, according to NAA President William P. Lanphear, Forest City Tree Protection Service, Cleveland, O.

Program for this '72 session includes data on the new Occupational Safety and Health Act and its effect on the commercial tree firm, use of pesticides within legal limits, and the economic outlook for commercial arborist businesses.

Turf-Vac Announces Gravely Distributorships

Turf-Vac Corporation has announced that Gravely Division of Clarke-Gravely Corporation will sell its line of vacuum ground sweepers in the eastern half of the U.S.

Hugh H. Horrell, executive vice-president of Turf-Vac, reports that Gravely locations will be stocked with the new line of equipment in time to serve the market during the fall season.

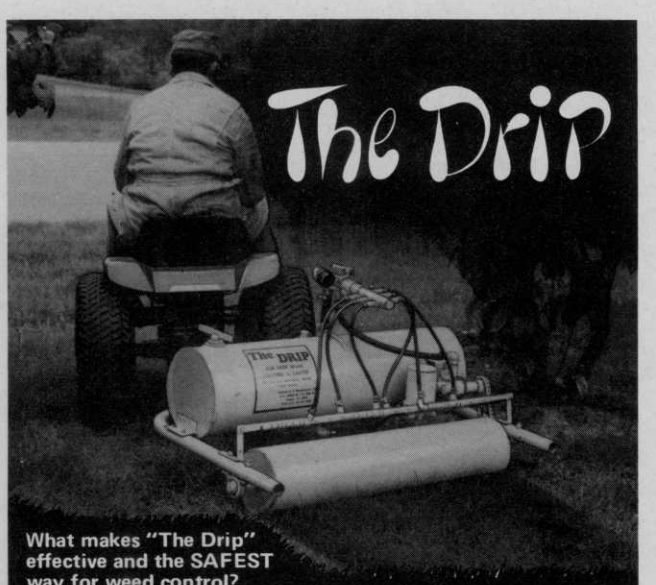
Turf-Vac headquarters at Long Beach, Calif.

Florida Nurserymen Growers Plan Major Show

A major 3-day Florida industry event, Trade Show Bonanza, begins October 8 at Hollywood-By-The-Sea, Fla. An extensive education program is coupled with three days of trading and exhibit demonstrations. Interest in the show is reflected by sale of the entire 139 available exhibit areas three months prior to the event.

The show committee consists of Wendell Butler and Bert Kraft, Fort Lauderdale, Tommy Hofmann, Hollywood, and Louis Cayll, Miami, all members of the sponsoring group, the Florida Nurserymen and Growers Association.

The group reports that this '71 show will feature the greatest roster of foliage plant displays yet. Thousands of rare hardwood ornamentals will be exhibited in addition to an all time high number of supplier product exhibits.



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With ordinary sprays and mists, coverage is inconsistent and dangerous at best, especially in confined areas where flowers, shrubs and other foliage is vulnerable. But "The Drip" utilizes a continuous film dripped onto a roller to make application. This direct contact gives you positive control and superior coverage, and avoids drift of spray.

"The Drip" is available in 3 models for covering any area, A self propelled hand model, a model "101" pull-type as illustrated, or the King-size gang of three 101 units which covers a big 9-foot swath. Write today for literature and complete details. Rubber covered rollers are available for special applications. Pat. No. 3408149

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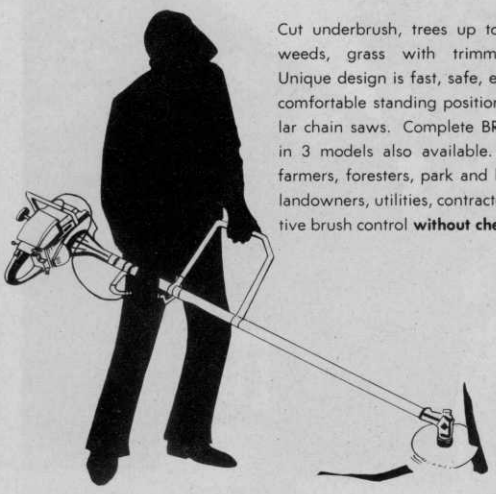

Cut underbrush, trees up to 9" dia. Clear weeds, grass with trimmer attachment. Unique design is fast, safe, easy to use from comfortable standing position. Fits all popular chain saws. Complete BRUSHKING units in 3 models also available. Now used by farmers, foresters, park and highway depts., landowners, utilities, contractors . . . for effective brush control **without chemicals.**

Remove chain and guide bar on your chain saw

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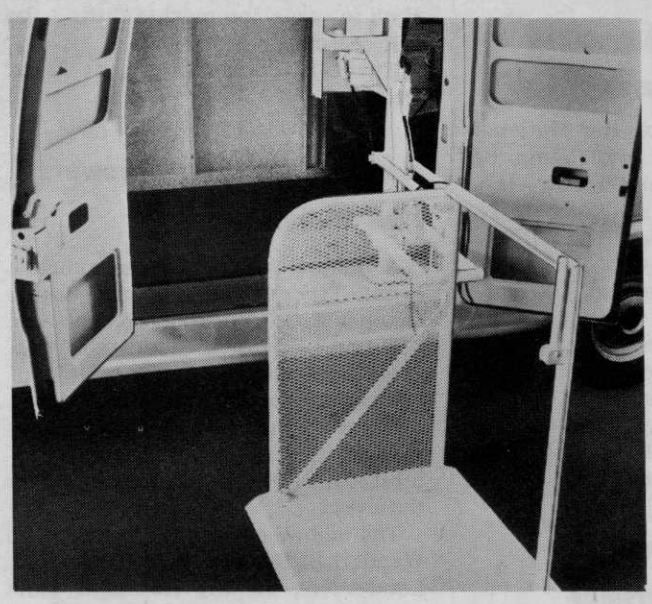
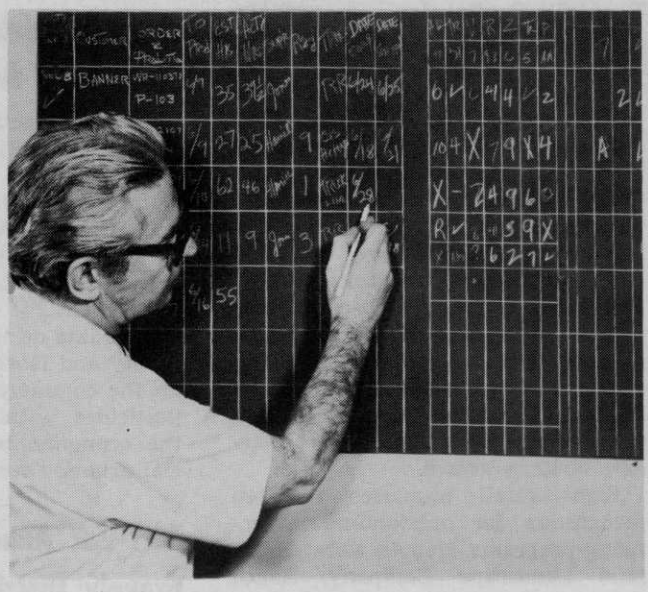


HYDRAULIC POWERED LIFT GATE: Maxon Industries, Inc., Huntington Park, Calif.

Hydraulic lift gate tradenamed "Swing-A-Way" designed for use in all standard Chevy, Dodge, Ford and GMC vans. Powered by an electric/hydraulic system working off the vehicles 12 volt battery, the unit can be installed at either side or rear doors. Bolted to the inside of the van and requires virtually no modifications to the vehicle. Easily removed and reinstalled when changing vans. Unit rated at 500 pounds capacity. For more details, circle (701) on the reply card.

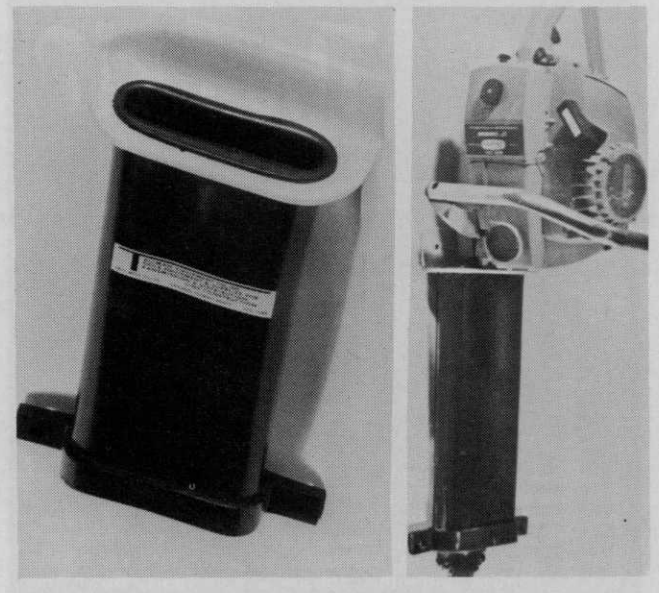


CHALK RE-MARKABLE BLACKBOARD CHARTPAPER: Kleeco Publishing, Inc., Chicago, Ill.

Durable 24" x 36" flexible chalk re-markable sheets can be used full size for production or inventory control, engineering, machine schedules, bulletin boards, sales or order flow charts, etc. or cut with scissors to any size desired for memo sheets, desk top reusable chalk pads, clip to machines for time, output control, and similar uses. Write on with any regular blackboard chalk. Draw in lines, column headings, etc., with a water-soluble felt-tip pen. Semi-permanent markings that can be wiped off with a damp cloth. Impervious to liquids, soaps, grease, most oils, food, many acids; wipe dry with soft cloth, tissue or blackboard eraser, wipe wet with sponge, soap, water. For more details, circle (702) on the reply card.

GUSHER PUMP: Orline Products, Los Angeles, Calif.

"Gusher" Pump is lightweight, tipping scales at 7¾ pounds. Moves water at the rate of 30 gallons per minute. Self-priming, centrifugal pump can be used to spray or irrigate, pump out swimming pools, flooded basements, etc.; and to provide fire protection. Powered by the 1 horsepower industrial O&R 2-cycle gasoline engine. For more details, circle (703) on the reply card.

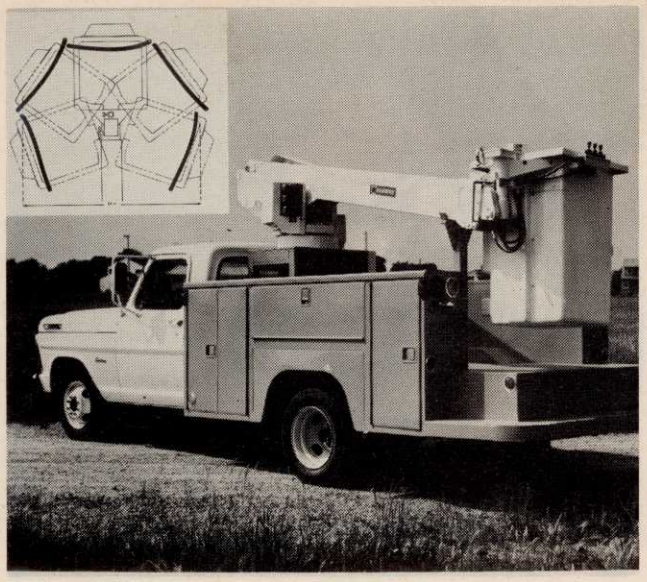


BUCKET TRUCK CHAIN SAW SCABBARD: Tallman Equipment Co., Inc., Chicago, Ill.

Non conductive, chain saw scabbard manufactured to fit all types fiber glass buckets and all standard manufactured chain saw for bucket truck tree trimming crews. Ideal for trucks, tractors and storage safe storage. Field tested for 2 years. Helps keep saw chains sharp, safe. Saves man hours. For more details, circle (704) on the reply card.

MULCH SPREADER: Venture Systems, Inc., Fresno, Calif.

Spreader designed with hopper that can be loaded from the top to spread fibrous material such as humus, redwood composition, steer manure and top soil. Insert may be added to distribution roller for even spreading of granular fertilizers, powdered lime, sand, and small grass seed. Also for sanding greens on golf courses, as the roller provides even distribution with low compaction, without rutting the green. Available in either push or pull type. For more details, circle (705) on the reply card.

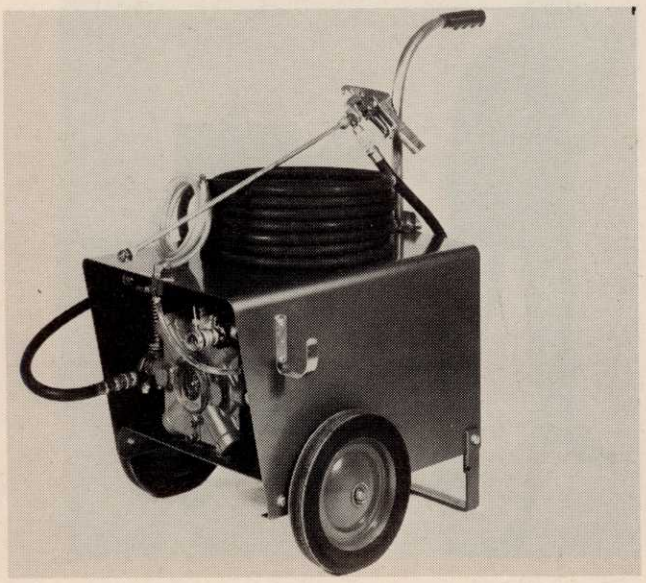


AERIAL LIFT: GAC Utility Products, Inc., Stoughton, Wis.

Aerial lift features wide range of bucket travel. Termed the Highway HLS-28A, the aerial lift has bucket mounting which permits the operator to swing 218° about the tip of the boom with easily-operated handwheel. Lateral travel of the bucket is 64 inches. The manufacturer states this feature, working in conjunction with continuous turret rotation and boom extension-retraction, provides infinite bucket positioning. As a result, the operator can work "square-on" to any job. Several work platforms and fiberglass buckets available, including all-weather type with heater. For more details, circle (706) on the reply card.

SELF-PROPELLED SPRAYER: Cushman Motors, Lincoln, Nebr.

Self-propelled, self-powered spray rig using Cushman Turf-Truckster, and a power take-off. Two types of sprayers, the Greens or Fairway. Greens Sprayer features a high-capacity centrifugal pump system designed especially to apply phenylmercuric fungicides directly on greens. Greens Sprayer with boom accessory will apply five gallons of liquid per 1,000 square feet of turf with standard nozzles. Higher capacity is available with special tips. For more details, circle (707) on the reply card.



HIGH PRESSURE WASHER: Dutton-Lainson Mfg. Co., Hastings, Nebr.

"Jet-Way" washer features 700 psi water pressure for farm, aircraft maintenance, oil field, automotive, industrial and marine equipment. A 24" trigger-action spray gun locks in spraying position and offers choice of solid stream or flat spray. Operates at 4 GPM from water hose supply. Automatic detergent metering adjusts from 1 to 18 ounces per minute. Washer is powered by a 2-horsepower, 155-230 volt motor. For more details, circle (708) on the reply card.

RUST-FREE TOOL CHEMICAL: WD-40 Company, San Diego, Calif.

WD-40, a liquid chemical product stops rust and corrosion by driving out moisture from pores of metals. Protects tools and equipment. Chemical is a non-conductor that may be used to dry out wet ignition systems, electric motors and wiring. Harmless to metal finishes, painted surfaces, rubber, plastics and fabrics, is non-greasy, doesn't stain and won't congeal in cold weather. Packaged in aerosol cans. Larger containers for bulk users. For more details, circle (709) on the reply card.

AUTOMATIC WATER-TIMER: Melnor Industries, Moonachie, N.J.

Compact device can start and stop the filling of water flow automatically. Water-Timer measures flow and delivers up to 750 gallons at a single full setting. Designed to compensate for variations and fluctuations in water pressure. Can operate under high or low pressures. Unit carries one year guarantee. Pressure-proof and constructed of non-corroding heavy duty zinc. For more details, circle (710) on the reply card.

SHALLOW FLOODING LIQUID RECOVERY UNIT: Venture Associates, Paterson, N.J.

Designed to handle liquid recovery at minimum depths over large areas. Unit will recover virtually all unabsorbed liquid from floors, and then by reversing the air flow, force pump the recovered liquid out of the container up to a theoretical height of eight feet, depending upon the density of the liquid and the voltage available. Features 2 hp vacuum/blower unit, coupled with 55 gallon container on portable carriage. Where liquid is distributed to a depth of 1/32 of an inch, unit will recover liquid from an area in excess of 2500 sq. ft., before emptying is required. For more details, circle (711) on the reply card.

VIBRATION-POWERED HOUR METER: Engler Instrument Co., Jersey City, N.J.

Operates without electric power. Registers operating, production or process time whenever equipment is vibrating and operating. Tamperproof, accurate, requires no wiring to install. Registers up to 99,999 hours, then starts over. Large sweep hand makes one revolution every hour of operating time. For diesel vehicles, bull-dozers, fork-lifts, mixers, cranes, etc. For more details, circle (712) on the reply card.

SELF-PROPELLED MOWER: Bunton Company, Louisville, Ky.

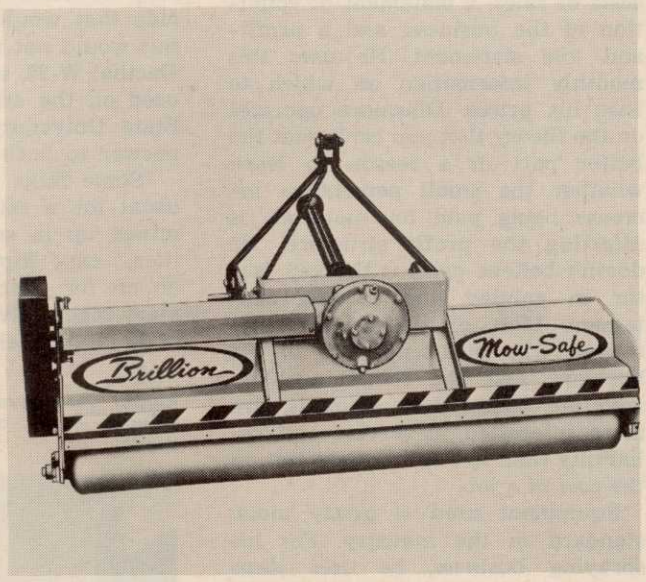
Operator of 32-inch self-propelled mower shows how optional grass catcher dumps clippings into piles or windrows for easy removal without stopping mower. Metal container may be lifted off for emptying and quickly installed or removed without tools. Option is rider attachment which allows the operator to ride open areas and medium grades; rider can be quickly detached without tools allowing operator to walk with safety on steep grades or uneven terrain. For more details, circle (713) on the reply card.

HEAVY DUTY BROOM: Broce Manufacturing Co., Inc., Dodge City, Kans.

A self propelled heavy duty broom. Economical one-man operation with operating speed of 1½ to 7 miles per hour; road speed, 30 mph. Automotive handling with maximum visibility, comfort, control, safety and operation. Designed for over the road sweeping of asphalt layers for highway construction projects, airport runways, streets, etc. Hydraulic system located for maximum efficiency and control of the broom height adjustment, broom revolution, and sweeping arc. Allows operator to control horizontal rotation of the broom up to 90°. For more details, circle (714) on the reply card.

HEAVY-DUTY TRIM TYPE MOWER: Goodall Division, Louisville, Ky.

Eighteen-inch commercial rotary power mower features a twelve-gauge steel frame designed to provide strength and durability with unbreakable handles. Heavy-gauge circular baffling adds strength and permits even discharge of grass clippings. For easy mobility and long-life, mower rolls on steel wheels with sealed ball-bearings and grease fittings, heavy-duty tires. Recessed wheels permit close trimming with either side. Cutting height adjustable from ½ to 3 inches. Adjustable steel blade driver that may be used as positive or slip-type and special crankshaft protection. Available in 18, 19, 20 and 22 inch cutting widths. For more details, circle (715) on the reply card.



FLAIL MOWER: Brillion Iron Works, Inc., Brillion, Wis.

A 72-inch-swath flail mower accenting safety. Incorporates a deflector bar into the hood to direct cuttings and debris down, not out. Design helps protect operator, passersby and buildings. Designated the Mow-Safe Ms-720. Combines features to optimize speed and smooth cutting. Uses six-inch roller with rounded ends to avoid rippling and gouging. Float-link permits the mower to follow ground contours and reduce scalping. For more details, circle (716) on the reply card.

Lewis Dinsmore looks over tree plantings he has made at Northwest Shopping Center, St. Louis.

TREE CARE *(from page 14)*

hard core of his business. These men are hired on a full-time basis and guaranteed year-round labor. Part-time help is hired for seasonal work.

Probably more important than the productive hours saved by Dinsmore's management practices is business acumen. An auditor furnishes him a monthly report. This report, drawn by the auditor from bookkeeping entries supplied by Dinsmore's long-time secretary and receptionist, Charlotte Watson, gives costs of sales, a statement of condition of the business, and a profit-and loss statement. He uses this monthly information on which to base his prices. Dinsmore operates on the theory that you can't wait the better part of a season to learn whether the small percentage increase being paid for materials is affecting the profit structure. He doesn't believe price is the key factor in gaining and holding customers. Most of the private customers who make up 80% of his business, and the remaining 20% who are commercial accounts, are more interested in service and reliability than in a few dollars less on the cost of a job.

Equipment used is pretty much standard in the industry. For his spraying business, he uses jeeps with 60-gallon John Bean tanks and pumps. Vehicles are equipped with special dual tires so in many cases, especially larger jobs, they may drive over turfgrass during treatment. Hoses are used to reach areas where hand spraying is necessary. During the busy season, six qualified crews are on the job.

For the future, Dinsmore predicts an acceleration in business for the industry. More people with greater appreciation for tree beauty will continue to increase the demand. Dinsmore points to the growth of garden clubs, the moving of businesses from railroad sidings to highways where they are developed into showplaces, and general strength of the economy. These factors, he believes, are keys.

Dinsmore Shop Time Savers

1. **Zoning the area served to save backtracking by crews.**
2. **Annual service contracts for advance scheduling.**
3. **Direct mail to regular clients as reminders for coming seasonal work and to help increase advance scheduling.**
4. **General tree work handled during slow periods.**
5. **Company coffee to eliminate en:oute coffee stops.**
6. **Housing located at nursery site.**
7. **Maintaining hard core of year-round experienced men and supplementing with part-time labor.**

COMMERCIAL TURF *(from page 12)*

other kind of a problem. As summer progresses, and the ground dries, crab grass spreads over the markers and through the dormant blue grass. It takes extra mowing and even hand-trimming to control it. That's why he went searching for a herbicide that would get the crab grass but would not corrode the markers. Dacthal W-75, which he found being used on the athletic fields at Iowa State University, proved to be the answer to both problems.

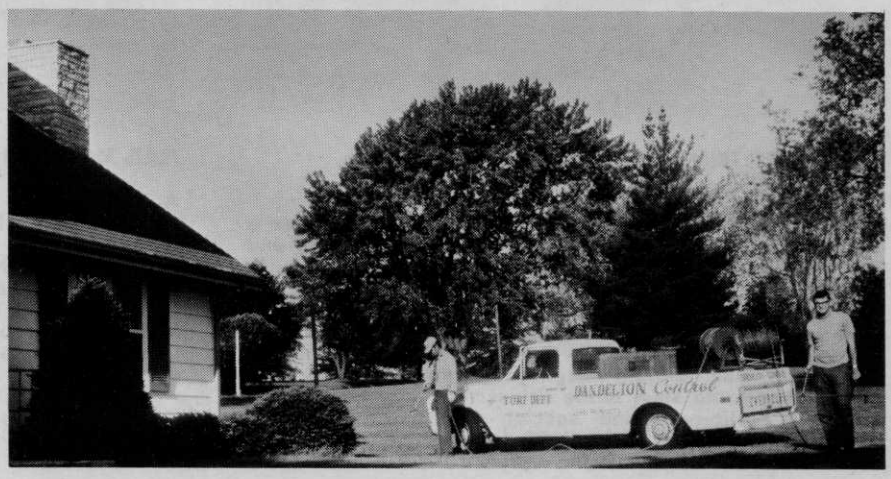
"Some folks may think it is unusual for a cemetery owner to be mixed up in so many other activities," says Ripper. "But you can't go on for ever making your cemetery bigger. Eventually you run out of land. You either start over in a new place, or be satisfied with what you have."

To Ripper, diversification proved to be the answer. He believes that lawn maintenance will continue to grow as a market. "I'm amazed at how much people will spend to have a good-looking lawn, and how little they know about what it takes to do it."

With labor difficult to get, he also likes the idea of having a permanent, experienced crew with him year in and year out.

Once the cemetery uses up the land he now has in Christmas trees, and, when the industrial park covers his sod farm, Ripper will probably have both operations going at another location.

Ripper uses seven 2-man crews such as this to serve 4500 customers including private lawns, apartment grounds, factory lawns, hospital grounds, and motel areas.



American Sod Producers Announce Post-Meeting Report

Executive-Secretary Henry W. Indyk of the American Sod Producers Association has just released the official report of Board action at the summer meeting held last month in Michigan (See August WTT).

Action of the Board of Trustees including appointing of new council chairmen is as follows: George Stewart (newly elected treasurer) chairman of administration and finance; Wily Miner, ecology; Dale Habenicht, legislative; Robert Daymon, management and industry; Ben Warren, membership; John Nunes, (newly elected director) mechanization; and William Latta, (newly elected director) public relations.

Indyk also reports that completion of the association's intensive effort to draft a set of sod specifications is in sight. The Board has approved a set of specifications and will shortly publish these. Copies will be made available to the ASPA membership for distribution.

The Board has approved development of a simple cost accounting chart of accounts and manual as a guide for the individual sod farm accounting system. This is being finalized by Robert Daymon and Don Juchartz. Juchartz is Wayne County, Mich., Extension Director. He has spent a number of years working closely with Michigan sod producers.

Printing of the first formal membership directory for the ASPA will be started shortly, according to Indyk. He has urged members and potential new members to remit dues promptly (dues are $50 yearly) in order to be included in the official directory. New members may submit checks directly to Indyk for processing (Dr. Henry W. Indyk, Exec.-Sec., ASPA, P.O. Box 231, New Brunswick, N.J. 08903).

The American Landscape Contractors Association has invited the ASPA to participate in the ALCA annual conference at Las Vegas, Nev., Feb. 9, 1972. Indyk reports the invitation was accepted and the ASPA will participate in a workshop on sodding. The Association will also provide an exhibit for this event. ASPA president, Tobias Grether, Cal Turf, will handle details on the workshop, and Parker Shirling, Princeton Turf at Centerville, Md., will assume responsibility for the booth.

The ALCA will reciprocate by participating in the upcoming winter ASPA annual meeting (Feb. 22-24, 1972) in California. Details for this winter meeting are being formulated.

Plans are also being made, Indyk states, for the ASPA '72 summer meeting to be held at Toronto, Ontario, Canada. Host will be the Nursery Sod Growers of Ontario.

Michigan Announces Turfgrass Ratings

Variety "blends" are recommended for most Michigan lawns, because no single variety has all the "ideal" characteristics of attractiveness, durability, and resistance to disease and adverse weather.

"A blend of two or three improved Kentucky bluegrasses is definitely preferred to the use of a single variety," according to Dr. James Beard, MSU turfgrass researcher.

"Since all available varieties have certain weaknesses, especially in terms of disease resistance, a blending of several improved varieties will result in a better overall turf."

Beard found no great differences among six different blends that contained Merion bluegrass.

Research showed that Merion, Fylking, Pennstar and Nuggett have the best general appearance throughout the season in trials comparing 66 bluegrass varieties.

For droughty, sandy soils and shaded areas, Beard recommends red fescue varieties. He said Pennlawn is generally considered to be the standard for red fescue quality, but Jamestown was equal or superior in appearance in last year's trials. Wintergreen, the new red fescue variety developed by MSU, had excellent color and quality until it and all varieties were attacked by leafspot in July.

Bentgrass varieties — which are best suited to high maintenance, closely mowed lawns or golf greens — were compared by Dr. Paul Rieke, MSU soil scientist. He found Toronto, Penncross and Cohansey to be superior in overall performance.

New Lawn Grass Now Available

A new lawn grass, developed at Michigan State University, should be widely available throughout the state this fall.

The new variety, Wintergreen, is a superior red fescue grass that is tailored to Michigan growing conditions, according to Drs. James Beard and Fred Elliott, the MSU crop scientists who developed it.

Beard and Elliott say that Wintergreen compares favorably to Pennlawn red fescue, and produces a very thick turf for lawns, parks, cemeteries, roadsides and industrial grounds.

Also, Wintergreen is much darker green, has superior uniformity, stays greener during the winter, and can be grown under shady conditions. Best of all, it produces good turf with a minimum of fertilizing and watering.

According to the scientists, the adaptation of Wintergreen to areas outside Michigan is not known. Wintergreen is designed specifically for use under the moderate climate and light soil conditions of the Wolverine State.

The best bet for home owners who want to get Wintergreen seed are commercial seed dealers who specialize in the production and sale of turfgrass seed.

Biological Control For Grubs In Turfgrass

Grub proofing by biological control is possible according to Entomologist Dr. Richard L. Miller, Ohio State University.

Miller says literature on milky

spore disease indicates that this bacterial disease causes the death of grubworms. It is most effective against Japanese beetle grubs but will also kill others. The disease, he reports, is sold as Doom or Japidemic. Cost is about $7 per pound, which will treat about 4000 square feet of lawn.

Milky spore disease is available from Fairfax Biological Laboratory, Clinton, Corners, N.Y. (For more information, circle Reader Card No. 717).

Insecticide Formulations Effective For Gypsy Mouth

Three new insecticide formulations have been tested recently for aerial application against gypsy moths at the Connecticut Experiment Station.

They are Dylox, a powder used with oil; Gardona in oil; and Sevin-4-Oil. All proved highly effective according to researchers doing the work.

Dr. Charles C. Doane and Paul W. Schaefer made the field tests in an area heavily infected with gypsy moths. Much of the area had been defoliated the previous year.

Oaks in 50-acre test plots showed about 10 percent defoliation when sprays were applied in late May. After treating, defoliation remained stable at the 10 percent damage level. But defoliation in untreated oaks in control areas sustained 70- to 90-percent defoliation.

Sevin-4-Oil residues proved highly toxic to gypsy moth larvae for at least eight weeks, the researchers said. Those of Dylox and Gardona were not toxic after the first rains.

Birds were not directly affected by the insecticides, according to the researchers, though they did note some normal changes as nesting and territory establishment proceeded following spray applications.

Details of the report are aavilable directly from the Connecticut Agriculutral Experiment Station, New Haven, Conn. 06504. Bulletin number of the report is 724.

Blackburn Reports On Aquatic Weed Symposium

Robert Blackburn, a research specialist in aquatic weed control with the Agricultural Research Service, Ft. Lauderdale, Fla., has just returned from England after attending the Third International Symposium of the Control of Aquatic Weeds.

He reports that interest in this session focused on control of aquatic weeds by biological means and the effect of chemical control procedures on the aquatic environment.

Papers presented on the white amur *(Ctenopharyngodon idella* Val.) emphasized the need for more information on its rate of weed consumption as related to temperature, the conversion of aquatic weeds to fish flesh, and the factors necessary for natural spawning. Stock rates of the fish necessary for weed control will probably vary with the water temperatures. Effect of the white amur on native fish populations is not considered a problem in most areas of the world. Even in England where sport fishing is important, scientists believe the likelihood of the white amur spawning naturally is remote. Cost of producing fish large enough to use for stocking purposes appears the major problem because of the slower growth in the colder climates of the European countries.

Blackburn also reports that considerable interest was shown in the snail marisa *(Marisa cornuarietis)* as a biological control for aquatic vegetation. Effect of low temperatures on survival of the snail and its appetite for rice and watercress would limit its use in many areas of the world. The possibility of breeding a more cold tolerant snail was discussed since the snail can be used for human consumption.

Scientists from Holland, Blackburn says, expressed considerable interest in diuron, ametryne, atrazine, and terbutryn as aquatic herbicides. They have collected considerable information on the residue of these herbicides in soil, water, and fish. Information has also been collected on their effect on plankton, benthos, water quality and fish toxicity. Diuron and terbutryn are the most promising for aquatic weed control in irrigation ditches. Diuron showed large accumulations in fish and bottom muds. For this reason, they are placing greater emphasis on terbutryn.

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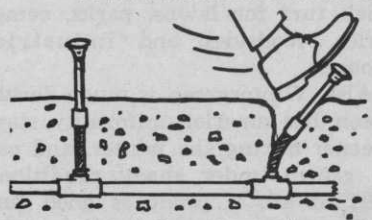

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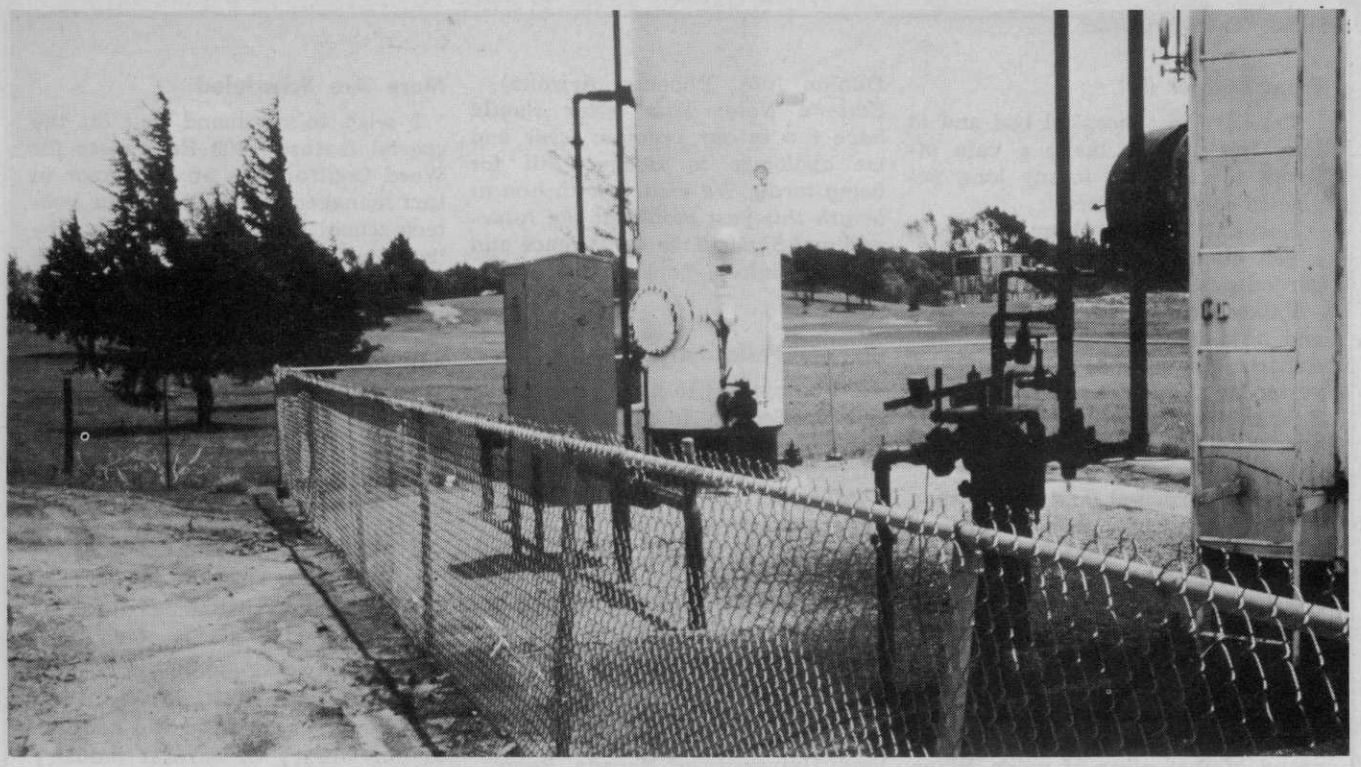


Clean area around liquid petroleum gas storage area show the effectiveness of chemical weed control.

INDUSTRIAL WEED CONTROL

(from page 13)

The company's four applicators are provided with especially designed trucks equipped with John Bean spray equipment. The use of 600-gallon, two-compartment tanks allows the applicator to select the proper chemical for the job while on location.

"This ability to change formulas is quite a savings in a day's work when you are 50 to 150 miles away from your base station," Price says.

Kem-Weed also uses an added disappearing marking agent when spraying. Of two-fold benefit, the green dye helps the applicator obtain even distribution and shows the customer where the chemical has been applied.

Inspection is also a big part of the game. "In the summertime, we go back to each area we have serviced to make sure the chemical is working properly. We honestly try to provide the type of service we would want if a purchaser," Price says.

The future of the industry, Price believes, lies in building greater confidence between companies to aid in the exchange of new ideas, methods, and in performing experimental work.

President of the Mid-Continent Weed Control Association, he would like to see chemical rates, chemical types, and equitable application standards established for greater safety throughout the industry.

Alvin Price, above, and Dusty O'Hair, below. All Kem-Weed applicator trucks are equipped with automatic hose take-up reels and normally carry 300 feet of hose. Manifold system allows drainage of either or both truck tanks.

From Badger Bill

I'm here in a hospital bed and at long last able to make a vain attempt to catch up to my long neglected correspondence.

Hospital? Oh, nothing really if a gall bladder operation can be regarded as such.

Talked to an old arborist friend and now president of our National Arborist Assoication, Bill Lamphear, yesterday. Your friend too. Happily he informed me we are to have our winter NAA meting in Phoenix again in '73. Great! . . .

I was surprised and more than delighted at the April issue of WEEDS TREES AND TURF. That was a tree (How to Trim a Tree Artistically, p. 24) I had brought back to its full beauty over a five-year period after it had been stubbed back years previous to that. Stubbed and mutilated as you know such trees are. So, you see, I'm quite proud of that piece of work. When I can do things like that I feel being a dedicated arborist is ever so much worthwhile. Sincerely, BADGER BILL (William K. Johnson, 744 E. Dunlop Ave., Phoenix, Arizona).

Editor's Note: This letter should have ran in our previous issue and we apologize to Badger Bill for being tardy. We visited with him at length this past month at the International Shade Tree Conference and he is definitely back in the swing. A.E.

Ecology Philosophy

I'd be pleased to have you use my talk on Ecology in your September issue. It created quite a bit of discussion at the California Landscape Contractors' Convention. Most members seemed to agree, though admittedly a bit reluctantly, that business would never be as free of legal restraints and liabilities in the future. But as I concluded, business will be the stronger because of the changes. My only plea is that thought be given now to avoid rash decisions later. Dr. Joseph E. Howland, University of Nevada, Reno.

Editor's Note: This letter is a response to our request to print this speech material as an article. See page 39.

More Are Scheduled

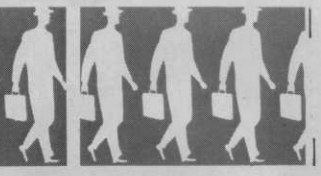
I wish to commend you on the special feature, "400 References for Weed Control." As an instructor in turf management school in our voc-tech school I have found these publications well used by our students. . . . If you have added this information index as a new feature to your magazine, I am hopeful that you will continue to expand the subject areas for such an index. Thank you. Robert I. Feser, Technical Education Center, Anoka, Minn.

Our Privilege

This is a short thank you letter for the subscription of WEEDS TREES AND TURF magazine. . . .

The magazine has been received and is now being circulated through our office and staff. We feel this will be a very worthwhile addition to our library of current industry publications. Thank you again. William L. Irvine, Jr., Nursery Specialist, California Department of Agriculture, Sacramento.

industry people on the move



Sarah Wood, appointed manager of public relations for Velsicol Chemical Corporation, Chicago. Prior to joining Velsicol in 1965, she was managing editor of Package Engineering.

* * *

Archie C. Pittman, named district sales manager for Olin Corporation's Gulf Coast agricultural division. Previously was regional nitrogen product specialist for southern region.

* * *

E. J. (Ed) Molaskey, to national sales manager for Pioneer Chain Saws, Galesburg, Ill. Served at factory level and as salesman and branch manager for 22 years prior to new position.

* * *

Thomas C. Zinninger, elected vice-president and general manager for agriculture, Velsicol. At one time was marketing vp for Elanco.

* * *

Neil Gustafson, industrial marketing manager for Hesston Corp., Hesston, Kans., named a winner of the American Forage and Grassland Council's merit award for excellence to Grassland Agriculture, USA.

* * *

Stewart Young, to district manager of new West Coast office opened by Precision Chipper Corporation. West Coast outlet location is Eugene, Ore. Precision headquarters at Birmingham and markets heavy chipping units worldwide.

* * *

Dr. Marinus Los, to group leader, organic synthesis, R&D, for American Cyanamid's agricultural division, Princeton, N.J. Formerly senior research chemist for Cyanamid; a native of Yorkshire, England, who joined the company in 1960.

* * *

Dr. Arnold P. Appleby, Oregon State University, named one of Geigy Recognition Award winners for '71. Presentations are made to organization representatives, in this case, Appleby received the honor via the Weed Science Society of America. He joins seven other winners for 10-day tour of research in Europe.

* * *

A. M. MacKinnon, corporate vp for CIBA-GEIGY assumes responsibility for all U.S. agricultural chemicals operations. He continues responsibility for controller's department.

* * *

William A. Groening, Jr., general counsel, named vice-president of Dow Chemical Company. Also serves as assistant secretary of company. Has been with legal department of Dow since 1937.

* * *

Riley E. Wilkinson, appointed western region manager for Allis-Chalmers Credit Corporation, Milwaukee. Will be responsible for sales, industrial, and field financing.

* * *

Herbert A. Holman, named manager of construction at Blaw-Knox Chemical Plants, Inc., Pittsburgh.

FORESIGHT FOR LANDSCAPERS

ECOLOGY — It Won't Go Away

By JOSEPH E. HOWLAND
Turfgrass Specialist, University of Nevada, Reno

WEBSTER devotes nine lines to ecology. Plus six more lines for ecologist. In shirt-sleeve English, ecology means living in harmony with nature. The press and TV have tried to make ecology a synonym for pollution.

Complacency won't solve pollution, or make ecology a forgotten word. (In 1958 Doubleday published my book *Gardens & Outdoor Living:* When asked what they could say about me on the book jacket, and told that I called myself a landscape ecologist, Doubleday's sales manager commented, "That'll never sell any books — what else can we call you other than an ecologist?" And that was only a dozen years ago.)

Americans have changed — and America will, which means that every landscape contractor must drastically change his business methods. For every time he does a job he sets in motion a long train of events. Not of his dong — but happening because of what he started.

Have you ever taken the time to think through the likely consequences of what you start on a specific job? You will. Or your firm will die. For you will be held accountable in the future for whatever happens after you leave the scene under moral pressure in '72, and legal restraint after the 1970's. This will be local first, then nation-wide. It is both good and sound politics.

Some specific predictions are:

1. The legal concept of "attractive nuisance" will be extended to cover situations way beyond Nader's dreams.

2. Every job will be sold under an implied guarantee of safety and value — difficult as the latter may be for you to "swallow" today!

3. Cut & fill permits will be tightly controlled — down to changes of 1-2 feet (with ruinous litigation bringing violators to bankruptcy).

4. Swimming pool installation will be costly (has the home swimming pool outlived its time; a horrifying thought, but a question worth pondering).

5. Density regulations will get universal and strict enforcement — such as families per acre, of course; but of even more interest to us today, visual pollution will be barred — when and where you can build a fence — or plant a tree! And noise will be recognized for what it is — harmful, avoidable wasted energy which can be easily controlled legally.

You may think it won't happen! Not to you. But consider the changes forced on P&G, Ford Motor Company, Boise Cascade, Union Oil Company and others.

There are five important actions each contractor ought to take, and right now:

1. Think through and write down the practical alternates open to your firm as each of these changes comes to your town. (Many people find it speeds up their thinking if they write down the alternates in the form of a chart.)

2. Estimate the consequences; can your firm survive?

3. Decide which risks are worth taking — and for how long. (Your goal as a manager of a business is to have thought out ahead of time what you will do — and when you will do it — before circumstances force you to make an instant or even a hasty decision.)

4. Recognize that political expediency will bring nasty surprises (like the hasty DDT ban); look every risk over for its political attractiveness.

5. Keep alert — read! My choice is SUNSET. It is not 100% infallible, of course. But management has full-time "alerters" poking around the homes of Californians every day in the week. They do spot trends.

And equally as important as SUNSET is SATURDAY REVIEW.

To keep yourself alert to changes in how people live; what people want from life today; and what they expect from you, consider the following:

a) Services not products — henceforth they want to know the upkeep cost per month, not just the landscape installation contract.

b) Chance to be proud of the way they use their time, not pride in an accumulation of "symbols of success" like a fancy house and garden, two big cars, a swimming pool, etc.

c) Instant landscaping — for average home occupancy, i.e. how often the family moves (now averaging less than three years).

d) Minimum demands on family labor for upkeep; teenagers are "unavailable" for yard work — and the average family now goes on for 16 or more years after youngest in the family reaches 18.

e) Willingness to supply whatever is wanted — for people today are conditioned to know that "it is possible" if the landscape contractor cares enough to want to supply.

Changes made for good reasons are good for business. Ecology can be the best thing that ever happened to the landscape contractor. For it is forcing him to get ready for change, by thinking thru what are the best alternatives open to him when change comes.

Dr. Howland's presentation is based on his appearance before the recent annual meeting of the California Landscape Contractors Association. He was sponsored by Nunes Turfgrass Nurseries, Inc., Patterson, Calif.

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Chipman of Rhodia Buys Missouri Plant

Chipman Division of Rhodia, Inc., is moving production of herbicides, fungicides, and insecticides of a St. Joseph, Mo., site. The company has purchased the former facilities of Swift & Company and plans to develop the site for both manufacture and distribution of its pesticide line.

Rhodia Vice-President Dr. E. L. Clark has announced that existing plant operations at North Kansas City, Mo., and at St. Paul, Minn., will be closed out.

James Toner, currently plant manager at the North Kansas City branch will become plant manager of the new facility, Clark said.

Company headquarters for Chipman is New Brunswick, N.J.

Chevron Gets Tree Label For Dibrom 8 Emulsive

The Environmental Protection Agency has awarded label registration to the Ortho Division of Chevron Chemical Company, San Francisco, Calif., for use of the insecticide Dibrom 8 Emulsive as an insect control for ornamental, shade, and forest trees.

Various formulations have previously been labeled for field and truck crops. The new label permits use in urban areas. The company especially recommends Dibrom for Douglas fir, fir, hemlock, juniper, pine, spruce, elm, maple, oak, and others.

Chevron reports that Dibrom is environmentally desirable because it is biodegradable and breaks down rapidly into harmless compounds after application.

It is effective for red spider mites, Sierra fir and Western hemlock bark borers, aphids, leaf miners, and other pests.

GAC Utility Products, Inc. New Name For Highway Line

GAC Utility Products Inc., is the new name for the Highway line of utility, construction, and maintenance equipment being manufactured by the previously known Utility Division of Highway Industries, Inc.

The utility line, acquired by GAC Corporation in 1965 has been producing products at Stoughton, Wis., and at Oliver, British Columbia, Canada. Production facilities at both locations are being moved and combined in a new plant at Edgerton, Wis. Ron E. Hull, vice-president and general manager, reports that the new plant should be in operation by October 1.

The firm which produces heavy-duty diggers, cable equipment, telescoping aerial devices, articulated aerial platforms, and other associated equipment will continue to carry the Highway brand name. The new location at Edgerton is at 405 E. Fulton St.

Jim Beard Honored As Fellow in ASA

James B. Beard, professor of crop and soil science, at Michigan State University, was elected a Fellow in the American Society of Agronomy (ASA) at the society's recent annual meeting at N.Y.C.

Beard was cited for his contributions to the knowledge of turfgrass management. His research includes environmental physiology, ecology and culture of turfgrasses with emphasis on heat stress, winter injury, adaptation to shade, thatch, the ecology of turfgrass communities, roadside establishment and sod production.

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insect report

TURF INSECTS

A BILLBUG

(Sphenophorus phoeniciensis)

CALIFORNIA: Adults 100 per square yard of Bermudagrass turf in El Centro, Imperial County.

GRASSHOPPERS

(Melanoplus spp.*)*

MARYLAND: Nymphs ranged 3-15 per square yard of grass and legume mixture planted along many State and Interstate highways in Baltimore, Frederick, Washington, and Carroll Counties. May move into adjacent croplands within next few weeks. ARKANSAS: Primarily *M. differentialis* and *M. femurrubrum* continue troublesome in extreme northwest area. About 1,500 acres treated in Washington County.

A LEAFHOPPER

(Dikraneura carneola)

OREGON: Severely damaged Alta fescue, pubescent wheatgrass, and orchard grass on 350-acre range revegetation project on Aldrich Mountain, Malheur National Forest. No controls undertaken this year.

INSECTS OF ORNAMENTALS

AN EARWIG

(Labidura riparia)

CALIFORNIA: Adults infesting soil around residence in Bakersfield, Kern County. This is a new county record.

HOLLYHOCK WEEVIL

(Apion longirostre)

VIRGINIA: Adults on hollyhock in Giles County. This is a new county record. KANSAS: Found on hollyhock in nursery in Wallace County. This is a new county record.

TREE INSECTS

EASTERN SPRUCE GALL APHID

(Adelges abietis)

WEST VIRGINIA: Galls on 20 percent of trees in one-acre block of Norway spruce in Greenbrier County and 70 percent of trees in 2-acre block in Pocahontas County.

ELM LEAF BEETLE

(Pyrrhalta luteola)

KANSAS: Second generation mostly pupated at Topeka, Shawnee County; many Chinese elms show severe damage. COLORADO: Damage becoming heavy; defoliation 100 percent on untreated trees. NEW MEXICO: Larvae heavy, 2-3 per leaf, on Siberian elms scattered throughout Las Cruces, Dona Ana County.

classifieds

When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

Rates: "Position Wanted" 10¢ per word, minimum $3.00. All other classifications 20¢ per word, minimum $4.00. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment. Boldface rule box: $25.00 per column inch.

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CITY OF SAN JOSE, CALIFORNIA. Arborist ($1133-1375) college degree in forestry, botany, landscape planning, park maintenance or related fields and 3 years experience in tree planting and maintenance. Program closely related to municipal street tree program. Apply: San Jose Personnel Dept., Room 215, City Hall, San Jose, Calif. 95110.

EXPERIENCED ground spray rig operator. Work for leader in industrial landscape maintenance field, under graduate horticulturist. California, permanent job, benefits, advancement. Resumé in own hand. Box 69, Weeds, Trees & Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

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VERMEER TREE MOVER, Model T-44, trailer mounted, chain driven. Completely overhauled and in good condition — $3,950.00. Tree Crane, complete with tree boom, winches, etc. 6 x 6 truck. Good condition— $3,500.00. Cut 'NCare, Inc., 2615 DeLeon St., Tampa, Florida 33609. Phone: 877-8261.

1968 ASPUNDH 16" 8-cylinder Chipper, $3600.00; Hardie sprayer 35 GPM, (as is), $300.00; 1968 5T Alenco crane with 60' boon extension on Ford chassis, $12,500.00. Ohio Chipper & Equipment Co., Mentor, Ohio 44060. Phone: 216 255-4355.

1967 20' GOB Prentice loader with grapples mounted on T-850 Ford Twin-Screw 20' bed, new tires, asking $11,500.00. Unit is in top condition. Edwards Tree Service, 3190 Cooper Foster Rd., Vermilion, Ohio 44089. Phone: 216 967-6750.

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"ATTENTION LANDSCAPERS— Sod Growers" 17 acres of Class A Merion sod on peat. Will sell by acre or yard. Make offer. Bob Kutchey, Phone: Washington, Mich. 781-4773.

ISTC *(from page 23)*

over a long-time period and at the same time withstand competition. Arboriculture, Goodall stressed, is a complex business. It requires specialists for sales, office, and production. In general, he said, businesses are getting larger. The 1-man company is being replaced by larger, well organized, and efficiently operated companies with qualified personnel. This simply means, he pointed out, that education is necessary, and knowledge is essential to expansion.

Tree selection, always a popular subject with Conferees, was the subject of William Flemmer, president of Princeton Nurseries, Princeton, N.J. Flemmer left no doubt among the group that he believes trees are destined to play a crucial role in the future welfare of our towns and cities. He also believes that growers have the production to satisfy demand. A few years back, he said, the number of bidders for municipal contracts was very low. The number now, he stated, is up and cities receive all bids needed to supply their requirements. This is particularly true, he said, for the newer improved clonal varieties of trees. Not long ago, Flemmer said, a city was virtually forced to plant seedling grown trees of wildly varying merit as shade trees. Today, he pointed out, plenty of the better clonal sorts are available for any municipal bid.

Flemmer said that the North American continent now stands preeminent in development of new shade trees. Both government agencies and commercial nurseries are producing a steady stream of new and greatly improved clonal varieties. Not many years ago, he said, anyone searching for new trees probably went to Europe to locate them. Only there could one find the arboreta and the grounds extensive enough to produce new trees. Now, Flemmer said, the reverse is true. European nurserymen and arborists come in increasing numbers to search for new trees.

In discussing specific varieties of trees, Flemmer said that among our most neglected genera of native trees are the Amelanchiers, long favorites in Europe but little planted and appreciated here where they originated. Their propensity, he said, to sucker vigorously from the base has not encouraged their use, but their good qualities such as clouds of white flowers in spring, freedom from disease and borers, ease in transplanting, and excellent fall color, are all in their favor. More attention in his own Princeton nursery has been given this small tree, he said.

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Southern Weed Science Society Meets Jan. 18

The Southern Weed Science Society, set for Jan. 18-20, 1972 at the Statler Hilton Hotel, Dallas, Tex., will again present a 9-section program. Few groups cover the broad range of weed control and associated interests of the industry as does this annual session. This year marks the 25th annual meeting.

Sections are: weed control in agronomic crops, turf, and pastures; weed control in horticultural crops; control of weeds and woody plants on rights-of-way and industrial sites; aquatic weeds; ecological aspects of weed control; environmental aspects; industry developments; and application techniques.

Trimmings

ALFALFA LEAFCUTTER BEE DEATHS are not being caused by pesticides as previously thought. Kills have been due to saponin in the alfalfa the bees eat. This new finding is based on research by Dr. Oscar Bacon, University of California at Davis. Bee deaths, he has reported, occur in direct proportion to the amount of saponin in the plants. Saponin is a naturally occuring toxic substance in the plants.

* * *

BALANCE IN NATURE NEVER WAS says Nobel Peace Prize recipient Dr. Norman E. Borlaug. He states that as an ecologist, forester, and scientist, he has never observed nature being in balance with anything. Rather, nature deals in one excess after another. Too much rain, too little rain, drought, forest fires, volcanic eruptions, disease, starvation and a host of other violent actions within nature led him to this conclusion.

* * *

GYPSY MOTHS CONTINUE spreading down the East coast. The USDA now reports trapping gypsy moths in Virginia's Fairfax, Accomack, and Northhampton counties and the cities of Chesapeake and Hampton. Three were found last year but finds this season are all new locations. Some 300 males have also been trapped in Maryland and government entomologists are warning residents of these states and the Capital to watch for egg clusters.

* * *

FOAM RUBBER ROLL-UP TURF MATS are a new development. In vogue at Vienna, Austria, the mats consist of laminated foam, peat, fertilizer, moisture regulating additives and foamed-in grass seed. Mats are laid in position and watered. When grass seed sprouts and forms a lush, green lawn, they can be watered, mowed and maintained as regular turfgrass. Called "Sempergreen" the roll-up mats can be rolled up once seed is sprouted and laid just as sod, in a new location. The company (Semperit AG.) says transplanting results in no loss of quality since roots quickly knit in.

* * *

ONE HERBICIDE, 2,4,5-T, according to the USDA remains a valuable asset to the nation. Should this herbicide be banned (as has been talked) added costs of farm and non-crop operations would range from $52- to $172 million, depending on restrictions placed on other herbicides.

Mississippi Turfgrass Assn. Sets Nov. 8-9 Conference

The Mississippi Turfgrass Association has set up what promises to be the best series of demonstrations ever on overseeding bermudagrass putting greens. So reports Professor Coleman Y. Ward at State College.

Ward further states that the remainder of the program is tailored for a broad spectrum audience in the turgrass industry.

Dates are Nov. 8-9 at the State College campus, State College, Miss. Demonstrations include those on topdressing used at time of overseeding, degree of vertical mowing prior to overseeding, influence of preemergence herbicides at time of overseeding, effect of grasses used on overseeded turf quality, and the effect of height, initial date, and subsequence frequency of mowing and fungicides on newly overseeded greens.

Other program highlights include winter mulching of greens and pythium control techniques. Further details are available from Professor Ward.

National Golf Foundation Schedules Activity Meeting

Members of the National Golf Foundation will review activities and assess their '72 program at a November 3 meeting at Hilton Head Inn, Hilton Head Island, S.C., according to Arthur W. Goettler of the Foundation. The session follows the fall meetings of the National Association of Golf Club Manufacturers, the Golf Ball Manufacturers Association, The Athletic Institute, and the Athletic Goods Manufacturers Association, all being held at the same location.

The Foundation's luncheon meeting begins at noon.

From the Connecticut Tree Protective Association, Inc., Arborist Newsletter, Summer 1971

The Years B.C. & A.D.

To the professional arborist struggling to restrain the insects and disease organisms, the weeds, the mites and the nematodes or the bacteria that constantly threaten to upset the environmental equilibrium that man has found desirable the years Before Carson now, in retrospect, hold a certain charm. Subsequent years may now be classed as the years Approaching Disillusionment!

A tour of the Connecticut countryside during the last week of June let the traveler see the picture. The widespread damage to the foliage of our trees and shrubs where the oak leaf tiers, elm span worms, gypsy moth larvae, elm leaf beetles, canker worms, aphids and other insects have not been subjected to any chemical controls is appalling. The insects could not have done better if they had been the ones to vote for restraining ordinances that prevented the arborists and the foresters from controlling them.

Many commercial arborists have done much better in the years A.D. At least, they have made a lot more money. By selling greater volume of the less effective chemicals demanded by the "no risk" environmentalists these arborists have been fully and lucratively employed. And the unsprayed woodlands plus the unsprayed properties of the aforementioned "no risk" people have provided a great reservoir of insects to assure a repetition of the program—perhaps for years to come.

Our municipal arborists, with their limited budgets for insect control, have had little reason to be happy in the years A.D. They are doing their best.

Our foresters have been pretty well stumped to provide protection for forest trees—the fuelwood, pulpwood and lumber of the future.

The private owner of trees and shrubs that he feels important enough to protect is undergoing frequently unnecessary expense. When he runs out of money he is free to wade through the piles of squirming larvae that have fallen from his denuded trees.

How can we work to change the years A.D. to the years of Applied Discretion?

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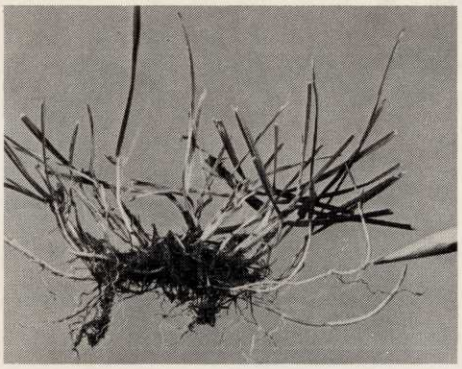
Baron is one of the few elite bluegrasses having stiff, relatively broad-bladed foliage, more pronounced in these respects even than Merion. It has a deep green color especially appealing to the American market. The reclining growth makes Baron suited to a low clipping height, so demanded these days for posh lawns, industrial properties and golf fairways. It is a vigorous variety, too, the seed sprouting quickly, the rhizomes knitting a strong sod rapidly. All Baron seed is Certified Blue Tag, poa annua and bentgrass free.



Baron, new rave in bluegrasses. Pencil points out to one of the abundant rhizomes from a culm cluster only 8 months old.

Dr. C. R. Skogley examines a strip of Baron sod.

Dr. C. Richard Skogley, Professor of Agronomy, Plant and Soil Science at the University of Rhode Island, reports: "In America, Baron has perhaps been grown longer on the proving grounds at Rhode Island than at any other locale and has performed exceedingly well in our trials. It has consistently rated among the best. It resembles Merion in many respects but seems less subject to dollarspot and less demanding of fertilization. So far we have seen no stripe smut, and leafspot incidence has been light." Dr. Skogley has recently released from the University three new improved varieties of grasses (namely, Jamestown, Red Fescue, Exeter Colonial Bentgrass and Kingstown Velvet Bentgrass).

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